



# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
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इस भाग में जिध पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।

(Separate paging is given to this Part in order that it may be filed as a separate compilation.)

## भाग III—खण्ड 2

### [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस

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Calcutta, the 27th June 1987

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1—127GI/87

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APPLICATION FOR PATENTS FILED AT THE HEAD  
OFFICE 214, ACHARYA JAGADISH Bose ROAD,  
CALCUTTA-700 017

The dates shown in the crescent brackets are the dates claimed under Section 135 of the Patents Act, 1970.

The 21st May 1987

405/Cal/87. AB Kompositprodukter S. K.-F. M. A screw joint.

406/Cal/87. Slavyansky Filial Vsesojuznogo Nauchno-Issledovatel'skogo I Proektno - Konstruktor'skogo Instituta Metallurgicheskogo Mashinostroeniya Imeni A. I. Tselikova. Installation for electro chemical cleaning of long materials, mainly wire used for welding.

The 22nd May 1987

407/Cal/87. Rinter Technik AG. An electronic supply system for fluorescent tubes with electrodes.

408/Cal/87. 1. Institut Chernoi Metallurgii. 2. Institut Elektrosvariki Imeni E. O. Patona Akademii Nauk Ukrainskoi SSR. Composition of welding wire.

409/Cal/87. Litef GmbH. Method and device for the rapid determination of azimuth angle using a strap-down gyroscope.

410/Cal/87. Burlington Industries, Inc. Flame resistant polyester/cotton fabric and process for its production.

The 25th May 1987

411/Cal/87. Rodolf Hardcovsky. Method of coating articles of aluminum and an electrolytic bath therefor. (Convention date 21st April 1987) U.K.

412/Cal/87. Texaco Development Corporation. Partial oxidation process.

413/Cal/87 E. I. Du Point De Nemours and Company. High modulus poly-p-phenylene terephthalamide fiber.

414/Cal/87. Satake Engineering Co., Ltd. Variable speed controlled induction motor.

415/Cal/87. PHB Weserhutte AG. Conveyor unit with ejection drum.

416/Cal/87. Staedtler & Uhl. Fitting for textile preparing machines, particularly combing machines, carding machines. etc.

417/Cal/87. 1. Trond Nilsen. 2. Erling C. Normann. Machines for adjustable longitudinal corrugating of sheet materials.

418/Cal/87. Business Forms Limited. Carbonless copy paper.

ALTERATION OF DATE

160107.  
(275/Del/84) Ante dated to 29th July, 1980.

160124.  
(568/Mas/84) Ante dated to 10th September, 1981.

160171.  
(563/Del/84) Ante dated to 10th April, 1981.

160189.  
(832/De/83) Ante dated to 21st December, 1981.

160191.  
(792/Del/81) Ante dated to 20th November, 1978.

COMPLETE SPECIFICATION ACCEPTED

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CLASS : 62-B & C<sub>1</sub>

160078

Int. Cl. : D 06 p 1/00, 7/00.

A PROCESS AND AN APPARATUS FOR THE CONTINUOUS DYEING OF YARNS.

Applicant : J. & P. COATS, LIMITED, OF 155 ST. VINCENT STREET, GLASGOW, SCOTLAND.

Inventor : RONALD BARR LOVE.

Application No. 1305/Cal/82 filed November 6, 1982.

Convention dated 7th November, 1981 (33659) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

8 Claims

A process for continuously dyeing yarn comprising coating a continuously moving yarn with a uniform coating of dye liquid deposited on the surface of the yarn at a rate such that the amount of dye liquid applied per unit of surface area of the yarn fibres lies between upper and lower limits of which the upper limit is an amount less than the natural sorptive ability of said unit of surface area of the yarn fibres to take up dye and the lower limit is an amount the weight of which is 10% of the weight of the quantity of yarn having said unit of surface area, then heating the dye-coated yarn to a temperature sufficient to dry the dye coating and to cause the dye to penetrate and become fixed in the yarn.

Compl. specn. 13 pages.

Drg. 1 sheet

CLASS : 166-B

160079

Int. Cl. : B 63 g 13/00.

A WARSHIP.

Applicant : BLOHM & VOSS AG, HERMANN-BLOHM-STRASSE 3, 2000 HAMBURG 11, FEDERAL REPUBLIC OF GERMANY.

Inventors : 1. KARL-OTTO SADLER, 2. WILLY SCHMIDT.

Application No. 1405/Cal/82 filed December 3, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 10 Claims

A warship comprising :

a hull;

a plurality of standardised foundatoins provided in said hull;

a central command post unit;

a navigation unit;

at least one communication unit;

a plurality of standardised operating units each comprising either a controlling unit or a controlled unit and each including a respective container which is closed at the top by a standardised platform receivable in one of said standardised foundations;

power supply lines connected to and terminating at said central command post unit and other ones of said units;

a respective data processor provided inside each standardised operating unit and having standardised hardware and software modules, each said data processor including a store in which data specific to the associated unit is stored so that the associated unit is capable of operating independently of the other standardised operating units;

wherein associated ones of said controlling and controlled standardised operating units form functional groups;

wherein the data processors of the standardised operating units which belong to the same functional group only exchange digitised crude information and wherein standardised information transmission lines are laid between the data processors of the standardised operating units of each functional group independently of the nature of the different standardised operating units for the exchange of said digitised crude information, whereby each data processor provides a standardised electronic interface equipped with the same connection contacts and sockets, in addition to the standardised information transmission lines and the standardised mechanical interface between the standardised platforms of the individually designed operating units and the standardised operating units.

Compl. specn. 24 pages.

Drg. 1 sheet

CLASS : 172-C<sub>0</sub>; D<sub>8</sub>, D<sub>9</sub>

160080

Int. Cl. : D 01 h 13/00, 13/14, 13/16.

METHOD AND APPARATUS FOR PRODUCING AN IMPROVED QUALITY SPUN YARN BY JOINING A THREAD IN AN OPEN-END SPINNING APPARATUS.

Applicant : SCHUBERT & SALZER MASCHINEN-FABRIK AKTIENGESellschaft, OF FRIEDRICH-EBERT-STRASSE 84, 8070, INGOLSTADT, GERMANY.

Inventors : 1. KURT LOVAS, 2. STEPHAN WITTMANN, 3. WALTER MAYER.

Application No. 130/Cal/83 filed February 3, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 20 Claims

Method of producing an improved quality spun yarn by joining a thread in an open-end spinning apparatus, in which the thread is delivered back to the open-end spinning apparatus by winding back a bobbin and an auxiliary pair of rollers and subsequently is again drawn out of the open-end spinning apparatus by a pair of draw-off rollers, characterized in that after termination of the return delivery, the thread is released from the auxiliary pair of rollers and, until the beginning of the normal spinning draw-off process, is subjected to an auxiliary draw-off process at a greater distance from the open-end spinning apparatus than this spinning draw-off process.

Compl. Specn. 49 pages.

Drg. 2 sheets.

CLASS : 154-F & G

160081

Int. Cl. : D 06 p 1/00, 7/00.

#### SCREENING MACHINE.

Applicant : HEIN, LEHMANN AG, FICHTENSTR. 85, D-4000 DUSSELDORF, WEST GERMANY.

Inventor : KURT HOPPE.

Application No. 612/Cal/83 filed May 17, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 6 Claims

A screening machine comprising :

a first support having a pair of opposite longitudinal members bridged by a plurality of mutually spaced apart first transverse members lying in a common first plane;

a second support having a pair of opposite longitudinal members bridged by mutually parallel spaced apart second transverse members lying in a common second plane and alternating with said first transverse members;

oscillating means connected to said supports and including a connecting rod oriented so that the force generated thereby on one of said supports runs through the center of gravity of a movement system formed by one of said supports for displacing same and effecting relating movement of said transverse members of said supports and of said first and second planes, so that the transverse members of the two supports move toward and away from one another while being confined exclusively to linear movement in separate planes of the respective transverse members which are inclined at a given angle to said first and second planes in which the transverse members of each support lie; and

a flexible screen carried by said transverse members of both of said supports whereby said screen sags between each first and a respective second transverse members as the respective first and second transverse members of said supports approach one another and is drawn taut between respective first and second transverse members as said supports move apart.

Compl. specn. 10 pages.

Drg. 1 sheet

CLASS : 119-C & F<sub>3</sub>

160082

Int. Cl. : D 03 d 37/00.

#### CIRCULAR LOOM (1)

Applicant & Inventor : FRANZ XAVIER HUEMER, OF SONNENUHRGASSE 4, 1060 VIENNA, AUSTRIA.

Application No. 773/Cal/83 filed June 20, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 Claims

A circular loom comprising a plurality of heald devices arranged circularly around a main shaft of the loom and each comprising an endless belt which is guided around an upper and lower rotatably mounted roller to form a radially inner and a radially outer belt run and which is provided in each run with a plurality of dyes to guide a respective one of two pluralities of warp threads and with a plurality of vertical extending slots disposed opposite the eyes in the other run to receive the warp threads of the other plurality, and drive means controllable by the main shaft to effect reciprocating movement of each belt in turn around the associated rollers thereby to produce mutually opposite upward and downward movement of the two pluralities of eyes for transient formation of shed from such guided warp threads.

Compl. specn. 12 claims.

Drg. 2 sheets

CLASS : 128-A

160083

Int. Cl. : A 61 f 13/18, 13/20.

ABSORBING PRODUCT AND METHOD AND APPARATUS 18, S-253 72 HELSINGBORG, SWEDEN.

Applicant & Inventor : LARS OSTEN FORSMAN OF ROROGATAN 18, S-253 72 HELSINGBORG, SWEDEN.

Application No. 795/Cal/83 filed June 27, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 16 Claims

Absorbing product comprising a substantially cylindrical cartridge of a web material (13) with a first inner layer (25) and a second layer (24) located on the outside of said inner layer, which merge into each other at a twisted portion (19) at one end of the cartridge, characterized in that a third outer layer (27) on the outside of said second layer (24) connects to the first layer (25) at a twisted portion (26) at the other end of the cartridge, said first layer defining a closed cavity between the two twisted portions (19, 26).

Compl. specn. 23 pages

Drgs. 11 sheets

CLASS : 45-E

160084

Int. Cl. : C 09 j 3/00 & C 09 k 1/02.

PRESSURE SENSITIVE HOT MELT ADHESIVE FOR SANITARY PRODUCTS.

Applicant : PERSONAL PRODUCTS COMPANY, OF VAN L'EW AVENUE MILTOWN, NJ 08850, UNITED STATES OF AMERICA.

Inventors : 1. FRANKLIN M. C. CHEN, 2. ARCHIE L. JONES.

Application No. 831/Cal/83 filed July 5, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 5 Claims

A hot melt pressure sensitive adhesive composition to be applied to the surface of articles for absorbing and retaining body fluids such as diapers, sanitary napkins and bandages comprising :

an A-B-A-block copolymer wherein said B midblock comprises polyolefins and said A end block comprises polystyrene and having a number average molecular weight of the individual A blocks of from about 7,000 to about 30,000;

a tackifying resin present in the proportions of from about 200 to about 300 parts by weight per 100 parts by weight of said block copolymer;

a plasticizer present in the proportions of from about 80 to about 150 parts by weight per 100 parts by weight of said block copolymer;

said block copolymer, tackifying resin, and plasticizer, being chosen and being present in the proportions such that said adhesive composition has a glass transition temperature of the rubbery phase ranging from about 0°C to about 10°C;

a temperature difference between the glass transition temperature of the rubbery phase and the flow temperature ranging from about 45°C to about 55°C;

a storage modulus which is a monotonic decreasing function of temperature between the glass transition temperature of the rubbery phase and the flow temperature;

said storage modulus having a value, at the arithmetic average temperature between the glass transition temperature of the rubbery phase and the flow temperature of from about  $3.5 \times 10^5$  to  $6.5 \times 10^5$  dynes/cm<sup>2</sup>; and

the function  $\log 10$  of the storage modulus verses temperature at a temperature equal to the arithmetic average of the glass transition temperature of the rubbery phase and the flow temperature having a slope of from about -0.005 to about -0.025 where the temperature is in degrees centigrade and the storage modulus is in dynes/cm<sup>2</sup>; and

said adhesive composition exhibiting a viscosity reduction of less than 5% when maintained at 350°F for ninety hours;

whereby said pressure-sensitive will exhibit a high equilibrium peel strength and a low adhesive transfer upon peeling

Compl. specn. 26 pages.

Drg. 1 sheet.

CLASS : 194-B.

160085

Int. Cl. : H 01 m 27/00.

IMPROVED ALKALINE FUEL CELL.

Applicant : ENERGY CONVERSION DEVICES, INC. OF 1675 WEST MAPLE ROAD, TROY, MI 48064, UNITED STATES OF AMERICA.

Inventors : 1. STANFORD ROBERT OVSHINSKY, 2. KRISHNA SAPRU, 3. SRINIVASAN VENKATESAN.

Application No. 862/Cal/83 filed July 13, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 9 Claims

A fuel cell comprising :

at least one cathode means for efficient oxygen reduction, said cathode means being formed from a disordered, non-equilibrium, metastable, multicomponent catalyst material such as herein described, and having a selected host matrix such as herein described having at least one transition element such as herein described and incorporating at least one selected modified element such as herein described;

a casing having said cathode means positioned therein;

at least one anode capable of hydrogen oxidation positioned within said casing and spaced from said cathode means; and

an electrolyte such as herein described in contact with both said anode and said cathode means.

Compl. Specn. 30 pages.

Drg. Nil.

CLASS : 85-j; 163-D.

160086

13 Claims

Int. Cl. : F 23 j 3/00.

## "A METHOD OF GENERATING STEAM."

Applicant : THE BABCOCK & WILCOX COMPANY,  
AT 1010 COMMON STREET, P.O. BOX 60035, NEW  
ORLEANS, LOUISIANA 70160, UNITED STATES OF  
AMERICA.

Inventors : 1. WILLIAM HARRIS MOSS, 2. LAWRENCE  
POPIEL, 3. THOMAS JOSEPH SCHEIB.

Application No. 966/Cal/83 filed August 3, 1983.

Appropriate office for opposition proceedings (Rule 4,  
Patents Rules, 1972) Patent Office, Calcutta.

## 4 Claims

In a method of generating steam at a particular cost per unit of heat in a boiler optimization of the cycle time ( $\theta_{opt}$ ) to schedule sootblowing during the operation of the boiler having an input of fluid with a particular specific heat ( $c_p$ ) comprising sensing the input and output temperatures of fluid to and from the boiler to obtain a difference ( $\Delta t$ ) of input and output temperatures, sensing the flow rate ( $m$ ) of the fluid in the boiler during its operation, determining an incremental cost ( $\phi$ ) of steam, with the time for actual sootblowing ( $t$ ) being known to determine the cost of steam for sootblowing ( $S$ ), calculating the heat flux ( $q$ ) of the boiler during its operation according to the equation  $q = mc_p t$ , calculating two scaling parameters ( $K$  and  $P$ ) according to the equation  $K = q_0 (m_{opt}/m_0)$  and

$$P = \frac{q_0 E / (\theta_{opt} - \theta_0) \left[ \frac{q_0 m_{opt} - q_{ob}}{m_0} \right] - \theta_b}{m_0}$$

and using values for  $T$ ,  $K$ ,  $S$  to calculate the optimum cycle time according to the relationship :

$$0 = P \ln \left[ \frac{P + \theta_{opt}}{P} \right] - \frac{P(\theta_{opt} + \theta_0) - S + \theta_0}{\theta_{opt} + P}$$

CLASS : 32-A1.

160087

CLASS : 32-A1.

160087

Int. Cl. : C 09 b 45/42.

## "A PROCESS FOR THE PREPARATION OF WATER-SOLUBLE COPPER COMPLEX DISAZO COMPOUNDS."

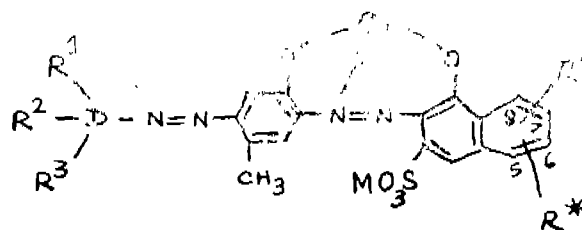
Applicant : HOECHST AKTIENGESSELLSCHAFT OF  
D-6250 FRANKFURT AM MAIN 80, FEDERAL REPUB-  
LIC OF GERMANY.

Inventors : 1. FRITZ MEININGER, 2. HANS HELMUT  
STEUERNAGEL.

Application No. 976/Cal/83 filed August 4, 1983.

Appropriate office for opposition proceedings (Rule 4,  
Patents Rules, 1972) Patent Office, Calcutta.

A process for the preparation of water-soluble copper complex disazo compound of the formula (1) of the accompanying drawings



in which :

D is a benzene or naphthalene ring;

R1 is a sulfo group or a carboxy group if D is a benzene ring and is a sulfo group if D is a naphthalene ring;

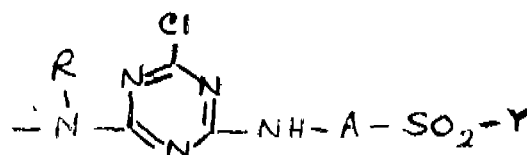
R2 is a hydrogen atom, a sulfo group, a carboxy group, an alkyl group of 1 to 4 C-atoms, an alkoxy group of 1 to 4 C-atoms, a chlorine atom, a bromine atom, an alkanoylamino group of 2 to 5 C-atoms or a benzoylamino group if D is a benzene ring, and is a hydrogen atom or a sulfo group if D is a naphthalene ring;

R3 is a hydrogen atom, an alkyl group of 1 to 4 C-atoms, an alkoxy group of 1 to 4 C-atoms or a chlorine atom if D is a benzene ring, or is a hydrogen atom or a sulfo group if D is a naphthalene ring;

R1, R2 and R3 may have meanings which are identical with one another or different from one another; M is a hydrogen atom or the equivalent of an alkali or alkaline earth metal or of a trivalent metal of the third main group;

R4 is a hydrogen atom or a sulfo group which can be attached in the 5-, 6-, 7- or 8- position of the naphthol nucleus;

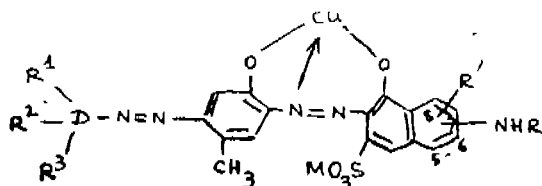
R5 is a group of the formula (2).



which is attached in the 5-, 6-, 7- or 8- position of the naphthol nucleus and in which R is a hydrogen atom or an alkyl group having 1 to 6 carbon atoms, which can be substituted by a hydroxy group, a sulfo group or an acylated hydroxy group, A is a phenylene group which can be substituted by one or two substituents belonging to the group comprising alkyl having 1 to 4 carbon atoms, alkoxy having 1 to 4 carbon atoms, chlorine, bromine, carboxy and sulfo, or is a naphthylene radical which can be substituted by a sulfo group, and Y represents the vinyl group or a group of the formula  $-CH_2-CH_2-Z$ , in which Z denotes a substituent which can be eliminated under alkaline conditions, but disclaiming compounds of the formula (1), in which at the same time, D denotes a benzene nucleus and R1 and R2 are both sulfo groups located in the para-position relative to one another and R4 denotes a sulfo group located in the 5-position of the naphthol nucleus and R5 denotes a group of the formula (2) located in the 6-position of the naphthol nucleus, which comprises reacting 2, 4, 6-trichloro-1, 3, 5-triazine in any desired sequence with an aromatic amino compound of the formula (3)



in which A and Y have the meanings indicated above and with an amino-disazo compound of the formula (4)



in which D, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and M are defined above except using the compounds of the formula (4) in which, at the same time, D denotes a benzene nucleus and R<sup>1</sup> and R<sup>2</sup> both represent sulfo groups in the para-position relative to one another and R<sup>3</sup> represents a sulfo group located in the 5-position of the naphthol nucleus and the amino group -NHR is attached in the 6-position of the naphthol radical.

Compl. Specn. 44 pages.

Drg. 22 sheets.

CLASS : 68 E & 133 A.

160088

Int. Cl. : G05f 1/00.

"AN ELECTRONIC CONTROL DEVICE FOR AUTOMATICALLY CONTROLLING CATHODIC OR ANODIC POTENTIALS FOR THE PROTECTION OF ELECTRICAL EQUIPMENT/INSTALLATIONS".

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-110 001, INDIA, AND INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : KUMMATTITHIDAL SANTHANAM RAJA-GOPALAN, HOLAVANAHALLY NARAYANA RAO VENKOBABAO, SUBBIAH GURUVIAH, NARAYANA-SWAMY KRITHIVASAN, SIVASWAMY BIRLASEKARAN, MUGUNDU MOHANRAM GURUMOORTHY & SWAMINATHAN KRISHANAN.

Application for patent No. 61/Del/83 filed on 2nd February, 1983.

Complete specification left on 22nd January, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 3 Claims

An electronic control device for automatically controlling cathodic or anodic potentials for the protection of electrical equipments/installation comprising a voltage comparator means (8) for comparing the anodic or cathodic electrode potential of the equipments/installation (3) one of the input terminals of the comparator being connected to the equipments/installation to be protected the other terminal being connected to a set potential (5) to preset the protection potential of the equipment/installation at a desired level which is displayed in a digital panel meter (6), by operating a single pole double throw (SPDT) switch (7) the two connections being made through a switch (4) which selects the type of protection, the output of the set potential is connected to the input of an electronic IC control block (9 & 10), the outputs of which are connected to a SCR switch (1) for putting the power, on and off.

Provisional specification 4 pages.

Compl. specn. 8 pages.

Drg. 1 sheet.

CLASS : 194 B

160089

Int. Cl. : C23c-17/00.

AN APPARATUS FOR DEPOSITING A MATERIAL ON A SUBSTRATE FROM AN ARC PLASMA.

Applicant : THE STANDARD OIL COMPANY, AN OHIO CORPORATION, HAVING A PLACE OF BUSINESS AT PATENT & LICENSE DIVISION, MIDLAND BUILDING, CLEVELAND, OHIO, 44115, U.S.A.

Inventor : VLADIMIR VUKANOVIC.

Application for Patent No. 403/Del/1983 filed on 15th June, 1983.

Appropriate office for opposition proceedings (Rule 4,

Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 11 Claims

An apparatus for depositing a material on a substrate from an arc plasma, said apparatus comprising :

a chamber within which a plasma arc is struck and maintained;

means for generating an arc plasma within said chamber in a non-local thermal equilibrium, including;

a tubular first electrode having a first central axis, opposing ends and defining a wall of said chamber;

end plates closing said ends of said first electrode to define said chamber;

a housing for mounting said end plates on said first electrode;

means for establishing and maintaining at least in a region between said first electrode means and said second electrode means a preselected gaseous environment at a pressure of at least approximately 0.1 atmosphere;

a second electrode coaxial with said first electrode, said second electrode having a tip for supporting said arc, said second electrode extending into said chamber through one of said end plates;

means for establishing a magnetic field proximate said tip inducing rotation of said plasma around said central axis of said first electrode;

means for introducing into said plasma a material to be deposited on a substrate; and

an orifice in said first electrode having a second central axis transverse to said first central axis and proximate said tip for passage out of said chamber of a tangential portion of said rotating plasma bearing said material to be deposited to a substrate exterior to said chamber;

and said means for generating said arc plasma further including;

means for generating an electrical current of at least approximately 0.5 amperes between said first electrode means and said second electrode means so as to maintain non-local thermal equilibrium conditions in said arc plasma.

Compl. specn. 17 pages.

Drg. 2 sheets.

CLASS : 80 H

160090

Int. Cl. : B 01 d—15/00, 17/00.

**PROCESS FOR SEPARATING AN EXTRACT COMPONENT FROM A RAFFINATE COMPONENT.**

Applicant : UOP INC., A CORPORATION ORGANISED IN THE STATE OF DELAWARE, WITH ITS PRINCIPAL PLACE OF BUSINESS AT TEN UOP PLAZA, ALGONQUIN & MT. PROSPECT ROADS, DES PLAINES, ILLINOIS 60016, U.S.A.

Inventor : CLARENCE GEORGE GERHOLD.

Application for Patent No. 544/Del/1983 filed on 8th August, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**15 Claims**

A process for separating an extract component of kind such as herein described from a raffinate component contained in a feed mixture comprising the steps of :

- (a) maintaining a unidirectional fluid flow system through a series of separating units in which said components have differential rates of travel due to selective retardation or acceleration of each of said components in each of said units, each of said units having a fluid inlet and a fluid outlet;
- (b) passing said feed mixture into one of said fluid inlets and a displacement fluid into another of said fluid inlets, said displacement fluid being capable of displacing said components from said separating units;
- (c) establishing within a system comprising said fluid flow system a component concentration distribution, zones of which comprise, sequentially, the highest purity displacement fluid (zone I), extract component diluted with displacement fluid (zone II), concentrated extract component (zone III), extract and raffinate component mixture with the extract component being the major component (zone IV), extract and raffinate component mixture with the raffinate component being the major component (zone V), concentrated raffinate component (zone VI), and raffinate component diluted with displacement fluid (zone VII), certain of said zones being combinable to obtain one or two of the pairs of zones II and III or III and IV and V and VI or VI and VII, whereby each pair is considered as one continuous zone, each zone may comprise part of only one pair, each of said zones II, IV V and VII having associated with it, unless paired with another zone, one of said fluid inlets and one of said fluid outlets, zone I having the fluid inlet for displacement fluid associated with it, and each of zones II and VI, or zone pairs II and III or III and IV, and zone pairs V and VI or VI and VII having associated with it a fluid outlet for a product effluent stream, said feed mixture being passed through a fluid inlet, the locus of which is at least proximate to the point on said component concentration distribution where the relative proportions of the extract and raffinate components are the same as that occurring in the feed mixture;
- (d) withdrawing an extract stream comprising the entire flow from the fluid outlet of zone III or one of zone pairs II and III or III and IV, and withdrawing a raffinate stream comprising the entire flow from the fluid outlet of zone VI or one of zone pairs V and VI or VI and VII;
- (e) passing the entire stream from each of the fluid outlets of each of said zones II, IV, V and VII, if not combined with another zone, to a corresponding fluid inlet, the locuses of each said outlet and

corresponding inlet being within the same zone of said component concentration distribution; and,

- (f) periodically simultaneously effecting the following shifting of said inlets and outlets : the feed mixture fluid inlet to what prior to the shift was the inlet of zone V or zone VII if zones V and VI are combined, the inlet of zone V, if uncombined, to what had been the inlet of zone VII or zone I if zones VI and VII are combined, the inlet of zone VII, if uncombined to that had been the inlet of zone I, the inlet of zone I to what had been the inlet of zone II or zone IV if zones II and III are combined, the inlet of zone II, if uncombined, to what had been the inlet of zone IV or to what had been the feed mixture inlet if zones III and IV are combined, the inlet of zone IV, if uncombined, to what had been the feed mixture inlet, the outlet of zone II, if uncombined, to what had been the outlet of zone III, or zone pair III and IV, the outlet of zone III or zone pair II and III to what had been the outlet of zone IV, if uncombined, the outlet of zone IV or zone pair III and IV to what had been the outlet of zone V or zone pair V and VI, the outlet of zone V, if uncombined, to what had been the outlet of zone VI or zone pair VI and VII, and the outlet of zone VI or zone pair V and VI to what had been the outlet of zone VII, if uncombined, and the outlet of zone VII or zone pair VI and VII, to what had been the outlet of zone II or zone pair II and III, said shifting being effected prior to the progression through said units of said component concentration distribution to the extent that the composition of the inlet or outlet streams to or from any zone or zone pair becomes inconsistent with the desired composition of that zone or zone pair.

Compl. specn. 50 pages.

Dr. 14 sheets.

CLASS : 24 D, & F

160091

Int. Cl. : F15b 13/00, F16d 66/00, 65/14,  
65/28 & B60t 13/00.

**BRAKING ASSISTANCE SERVOMOTOR.**

Applicant : D. B. A. OF CENTRE PARIS PLEYEL 93521 ST DENIS CEDEX 01, FRANCE, A COMPANY ORGANISED UNDER THE LAWS OF FRANCE.

Inventor : JEAN JACQUES CARRE.

Application for Patent No. 572/Del/83 filed on 23rd August, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**10 Claims**

A braking assistance servomotor comprising a casing, an assistance piston assembly dividing the casing into two chambers, and displaceable under control of distribution valve means and an articulated force amplification system connecting the piston assembly to an output member, characterised in that the said articulated force amplification system comprises at least one flexible elongate member having its opposite ends fixed to the piston assembly and to the casing respectively, the said elongate member, between its two said ends being trained around a return member so as to fold back, said return member being carried by a valve sleeve and that said sleeve encloses said distribution valve means and that said sleeve is connected to said output member.

Compl. specn. 8 pages,

Drg. 2 sheets

CLASS : 206 E &amp; 146 D

160092

Int. Cl. : H 01 L 15/00.

## 1 PHOTO ELECTRIC CONVERSION DEVICE.

Applicant : SEMICONDUCTOR ENERGY LABORATORY COMPANY LIMITED 21-21 KITAKARASUYAMA, 7-CHOME, SETAGAYA-KU, TOKYO, JAPAN.

Inventor : YAMAZAKI SHUNPEI.

Application for Patent No. 512/Del/1983 filed on 27th July, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 16 Claims

A photoelectric conversion device in which a plurality of semiconductor elements provided sequentially on a substrate in a side-by-side relation and connected in series one after another, characterised in that; said substrate comprises a flexible, insulating sheet-like member composed of an insulating film on the surface of a flexible metallic sheet-like member; each said semiconductor element has a first electrode located on the substrate, a non-single-crystal semiconductor laminate member on said first electrode; said non-single-crystal semiconductor laminate member having therein at least one PN or PIN junction, and a transparent second electrode located on the non-single-crystal semiconductor laminate member in opposing relation to said first electrode; the second electrode of one said semiconductor element being coupled with the first electrode of an adjacent said semiconductor element through a coupling extension of said second electrode of said one semiconductor element; a first external connection terminal leading out from the second electrode of the first of said semiconductor element; and a second external connection terminal leading out from the first electrode of the last of said semiconductor elements in said series.

Compl. specn. 58 pages.

Drg. 11 sheets

CLASS : 187 C<sub>3</sub>.

160093.

Int. Cl. : H04b 3/00.

## APPARATUS FOR DETECTING A LOOP DURING RINGING WITH A TELEPHONE SYSTEM.

Applicant : COMPAGNIE INDUSTRIELLE DES TELECOMMUNICATIONS CITALCATEL, A FRENCH COMPANY, OF 12 RUE DE LA BAUME, 75008 PARIS, FRANCE.

Inventor : PIERRE ALBOUY.

Application for Patent No. 630/Del/1983 filed on 12th September, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

## 5 Claims

Apparatus for detecting a loop during ringing with a telephone system, comprising zero pass detector means for detecting zero passes in a voltage proportional to the line current and for generating a pulse signal constituted by positive and negative rectangular pulses of equal amplitude and width dependant on the duty ratio of the line signal, pulse signal processing means connected to said zero pass detector means, and storage means connected to said pulse signal processing means for storing a signal delivered by the processing means, characterized in that said signal processing means are constituted by a saturable integrator circuit connected to the zero pass detector means and a comparator having a first input connected to the saturable integrator circuit and a second input connected to a positive potential of a first voltage source said saturable integrator circuit delivering a triangular signal having a positive peak value which increases after ringing has been answered, and said comparator comparing said triangular signal with the reference voltage and having an output connected to the storage means to deliver a signal when a caller subscriber answer.

Compl. Specn. 29 pages.

Drg. 3 sheets.

CLASS : 116 F &amp; G.

160094.

Int. Cl. : B 66 b 1/26, 13/14; H02 p 7/00 &amp; G05 d 13/62.

## AN ELEVATOR.

Applicant : OTIS ELEVATOR COMPANY, A CORPORATION OF THE STATE OF NEW JERSEY, UNITED STATES OF AMERICA, LOCATED AT TEN FARM SPRINGS, FARMINGTON, CONNECTICUT 06032, U.S.A.

Inventor : SALIH JALAL TAWFIG.

Application for Patent No. 676/DEL/83 filed on 29th September, 1983.

Appropriate office for filing opposition proceedings (Rule 4, Patents Rule 1972) Patent Office Branch, New Delhi-5.

## 4 Claims

## An elevator comprising

a polyphase electric motor, said motor having N phases and corresponding windings :

a D.C. power source :

means connected to the power source and the motor for providing current or voltage from said source to each stator winding in the motor :

an encoder connected to the motor for providing a signal (TACH) that represents motor shaft position :

an elevator car that is propelled by the motor :

an elevator control connected to encoder and means for providing current or voltage to produce alternating N phase current or voltage for said stator windings to control motor speed (R.P.M.), slip and direction :

the elevator being characterized in that said elevator control comprises :

means for providing a signal (amplitude) in response to the Tach signal to control the motor speed (R.P.M.), said means being connected to said encoder :

speed and torque control means for providing a signal (slip) in response to the Tach signal to control the motor slip, said speed and torque control means being connected between said means for providing amplitude signal and said encoder :

means connected to said encoder for providing a dictated motor speed signal in response to the Tach signal, said dictated motor speed signal representing a desired motor speed :

means connected to the elevator car and the encoder for providing a cab load signal representing the load in the car, and means connected to the encoder and said means for providing the dictated motor speed signal for providing a first error signal in response to said dictated motor speed signal and said Tach signal, said error signal representing the difference between the actual motor speed and the desired motor speed, and for providing a second error signal by amplifying said first error signal in relation to said cab load signal, so that the magnitude of said error is increased when the motor is about to be started if the cab load is greater than a certain load.

Compl. Specn. 24 pages.

Drg. 3 sheets.

CLASS : 155 E.

160095.

Int. Cl. : D-06 n 7/00.

## NON-ASBESTOS FLEXIBLE SHEET MATERIAL.

Applicant : T & N MATERIALS RESEARCH LIMITED, A BRITISH COMPANY, OF 20 ST. MARY'S PARSONAGE, MANCHESTER M3 2NL, ENGLAND.



Inventors : BRIAN HARGREAVES, NOEL CHRISOPHER, Mc KENZIE, AND ROBERT ALLAN CLANCAS-TER.

Application for Patent No. 731/DEL/1983 filed on 1 Nov. 1983.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-5.

### 3 Claims

Non-asbestos flexible sheet material made by dewatering on a water-permeable conveyor a layer of aqueous slurry and compressing and drying and dewatered layer, the aqueous slurry employed being one that contains the following ingredients in the following proportions by dry weight :

China clay	20-50%
Mica or chlorite	20-50%
Graphite	10-40%
Cellulose fibres	2-10%
Vitreous fibre in wool form	2-10%
Synthetic organic polymer binder	2-10%

wherein the percentage of ingredients in so selected that the aggregate does not exceed 100.

Compl. Specn. 9 pages.

CLASS : 39 C.

160096.

Int. Cl. : C01b 2/00.

A PROCESS FOR PRODUCING AN AMMONIA SYNTHESIS GAS FROM A METHANE-CONTAINING FEED-STOCK GAS.

Applicant : EXXON RESEARCH AND ENGINEERING COMPANY, A CORPORATION OF DELAWARE, UNITED STATES OF AMERICA, CARRYING ON BUSINESS AS A COMPANY FOR THE HOLDING OF PATENTS AND GRANTED LICENSES THEREUNDER, AND TECHNICAL DEVELOPMENT AND RESEARCH WORK AT 180 PARK AVENUE, FLORHAM PARK, NEW JERSEY, UNITED STATES OF AMERICA.

Inventor : PHILIP ANDREW RUZISKA.

Application for Patent No. 776/Del/1983 filed on 22nd November, 1983.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

### 6 Claims

A process for producing an ammonia synthesis gas from a methane-containing feedstock gas which comprises the of reforming the methane-containing feedstock gas in the presence of steam, treating the reformed gas in a shift conversion zone to convert CO catalytically with steam to  $\text{CO}_2$  and methanation from the gas stream withdrawn from the shift conversion zone, characterised in that it employs as said feedstock gas a desulfurized, hydrogen-rich gas containing methane and

(a) reforming said hydrogen-rich gas by the steps of :

(i) admixing steam with said hydrogen-rich gas and partially reforming the resulting gas mixture in a tubular heat exchanger containing primary reforming catalyst while maintaining same gaseous mixture in indirect heat exchange with a secondary reformer effluent gas; and

(ii) recovering a partially reformed gas product from said tubular heat exchanger and secondarily reforming said recovered, partially re-

formed gas product in a secondary reformer in the presence of air, said air being introduced to said secondary reformer in an amount sufficient to provide a hydrogen : nitrogen molar ratio of about 3 : 1 in the ammonia synthesis gas;

(b) recovering a secondary reformer gas effluent from said secondary reformer and passing said secondary reformer effluent to said tubular heat exchanger for indirect heating of said hydrogen-rich feed-stock and steam gas mixture; and

(c) recovering a partially cooled, secondary reformer effluent from said tubular heat exchanger and passing said partially cooled effluent as feed to said shift conversion zone;

whereby said ammonia synthesis gas is withdrawn from said methanation step and is suitable for direct feed to an ammonia synthesis reaction.

Compl. Specn. 24 pages.

Drg. 1 sheet.

CLASS : 198 B.

160097

Int. Cl. : B01d 21/01, B03d 1/08, 3/06.

"IMPROVED PROCESS FOR SEPARATING FINEST MINERAL GRAIN OF  $\leq 32\mu\text{m}$  FROM WASHING OBTAINED IN COAL PROCESSING AND WASTE TIP PROCESSING OR FROM COAL SLURRIES".

Applicant : CHEMISCHE FABRIK STOCKHAUSEN GmbH, a German Corporation, of Bakerrpfad 25, D-4150 Krefeld, West Germany and SAARBERGWERKE AG, a German corporation, of Postfach 1030, D-6600 Saarbrücken, West Germany.

Inventors : HANS-GEORG HARTAN, DIETRICH & WERNER PADBERG.

Application for Patent No. 812/Del83 filed on 2nd December, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

### 4 Claims

An improved process preferably a continuous process for separating finest mineral grain of  $\leq 32\mu\text{m}$  from washings obtained in coal processing and waste tip processing or from coal slurries, characterised in that the washing or coal slurry is treated with an anionic selective dispersing agent of the kind such as herein described for the separation of finest mineral grain, and optionally while stirring and diluting with water, the coal is flocculated out of the resulting stable dispersion using a flocculating agent known *per se* by known manner.

Compl. Specn. 12 pages.

Drg. 1 sheet.

CLASS : 49 F & 180.

160098

Int. Cl. : A47j-27/00, 49/00.

"A DEVICE FOR BURNING SOLID FUELS FOR DOMESTIC COOKING AND LIKE PURPOSES".

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH Rafi Marg, New Delhi-110 001, India, an Indian registered body incorporated under the Registration of Societies Act (Act XXI of 1860).

Inventors : SIRIPURAPU KONDALA RAO, MANOJ MOHAN SEN, BARUN DASGUPTA, PHANINDRA CHANDRA TALAPATRA AND GISPATI PRASAD BAL.

Application for Patent No. 61/Del/1984 filed on 21st January, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

Wherein, X represents H, or NH, or an alkali metal selected from the group consisting of sodium and potassium; R<sup>1</sup> represents H, or methyl; R<sup>2</sup> represents lower alkyl having from 2 to 4 carbon atoms; n is an integer in the range from 2 to 6; m is an integer in the range from 3 to 180; and, for each y (that is, y = 1) X is an integer in the range from 2 to 5, and Z is an integer in the range

from 0.02 to 0.3; and x, y and z are present in relative heterogeneous order.

said process comprising :

- (a) reacting a mixture comprising (meth) acrylic acid and a lower alkalene oxide having from 2 to 6 carbon atoms, in the presence of an esterification catalyst selected from the group consisting of pyridine, tetramethylammonium chloride, trimethylbenzylammonium chloride and 2, 6-lutidine at a temperature in the range from 60°C to 120°C, for a period of time sufficient to form HAA<sub>m</sub> and HAA<sub>n</sub> in the ratio from 1 : 0.02 to 1 : 0.3;
- (b) without separating the esterification catalyst from the reaction mass, adding an effective amount of polymerization initiator of the kind such as herein described acid carrying out polymerization in a mutual solvent of the kind as herein described at the reflux temperature of said solvent;
- (c) recovering in a manner known *per se* the prepared copolymer.

Compl. Specn. 19 pages.

CLASS : 179E, G.

160102

Int. Class : B65d-39/00.

"A CLOSURE ASSEMBLY FOR DISPENSING LIQUID PRODUCTS FROM CANS AND PAILS".

Applicant :—AMERICAN FLANGE & MANUFACTURING CO. INC., a corporation organised under the laws of the State of New Jersey, United States of America, of 1100 West Blancke Street, Linden, New Jersey 07036, U.S.A.

Inventors :—DAVIS BLAIR DWINELL AND JEREMIAH JOSEPH LAURIZIO.

Application for Patent No. 194/Del/1984 filed on 2nd March, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### (9 Claims)

A closure assembly for dispensing liquid products from cans and pails comprising a molded plastic closure having a downwardly opening annular sealing channel peripherally disposed at one end, said closure defining a fluid passage closed off by means of an integrally molded sealing diaphragm, a weakened tearing zone provided within said diaphragm, a pull member integrally connected to said diaphragm, a closure cap overlying said fluid passage so as to create a void within which said pull member is housed and support means within said void in contact with said diaphragm, said support means being spaced closely to said closure cap and being adapted to restrain said diaphragm against excessive deflection in response to a pressure surge.

(Complete specification 9 pages) Drawing 1 sheet.

CLASS : 83 B.

160103

Int. Class : A23g-3/00.

PROCESS FOR PRODUCING A KOLA FLAVORED CHEWING GUM COMPOSITION.

Applicant : WARNER-LAMBERT COMPANY, a corporation organised and existing under the laws of the State of Delaware, USA., of 201 Tabor Road, Morris Plains, New Jersey 07950, USA.

Inventors : DOMINIC JOSEPH PICCOLO.

DEBORAH JANE FFINERMAN.

Application for Patent No. 208/DEL/1984 filed on the 6th March 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 6 Claims

A process for producing a Kola flavored chewing gum composition having improved perceptable kola flavour, in which the improvement comprises the sequential steps of :

- (a) blending into the melted chewing gum base a premix of sweetener and natural kola extract in amounts of 0.05% to 2%, percents being by weight of the total composition, along with conventional additives, such that extract is distributed throughout the base matrix;
- (b) introducing an artificial oil-soluble kola flavor in amounts of 0.05% to 5.0% as the last ingredient added to the gum base;
- (c) forming chewing gum pieces from the resultant pliable mass.

(Complete specification 19 pages).

CLASS : 32F2(b), 32F1.

160104

Int. Class : C07d 99/00.

"A PROCESS FOR PREPARING 1, 3-DIHYDRO-6-METHYL-7-HYDROXY-FURO-(3, 4-c) PYRIDINE DERIVATIVES AND ITS PHARMACEUTICALLY ACCEPTABLE ACID ADDITION SALTS THEREOF".

Applicant : SOCIETE DE CONSEILS DE RECHERCHES ET D'APPLICATIONS SCIENTIFIQUES (S.C.R.A.S.), of 264, rue du Faubourg saint-Honore-75008 Paris, France, a French company.

Inventor : ANDRE ESANU .

Application for patent No. 229/Del/84 filed on 13th March 1984.

Convention date 5-4-83 & 18-10-83/8309165 and 8327815/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### (2 Claims)

A process for preparing 1, 3-dihydro-6-methyl-7-hydroxy-furo-(3,4-c)-pyridine derivatives of the general formula I of the drawings and pharmaceutically accepted acid addition salts thereof, wherein each of A1 and A2 independently represents a straight chain saturated or unsaturated hydrocarbon group having from 1 to 5 carbon atoms, a heterocyclic group having up to 6 ring atoms, a carbomonocyclic group, a phenylalkyl group or a phenylalkenyl group, each of the groups represented by A1 and A2 being unsubstituted or being substituted by one or more chlorine or fluorine atoms, trifluoromethyl groups, alkyl groups having from 1 to 5 carbon atoms, alkoxy groups having from 1 to 5 carbon atoms, alkylthio groups having from 1 to 5 carbon atoms, dialkylamino groups in which each alkyl group has from 1 to 5 carbon atoms, dialkylaminoalkoxy groups in which each of the two alkyl groups and the alkoxy group has from 1 to 5 carbon atoms or A— or B alkoxy N-pyrrolidinyl groups in which the alkoxy group has from 1 to 5 carbon atoms comprising oxidizing the secondary alcohol  $\alpha$ 4, 3-O-isopropylidene-1-methyl-5- (1-hydroxy-1-A1)-methyl pyridine by any known method, which leads to a corresponding ketone, reacting the resultant ketone with a compound of the general formula XA2 wherein X stands for Br or I and A2 has the meaning given above, in the presence of magnesium in diethyl ether at the boiling point and treating the resultant tertiary alcohol with an acidic agent such as herein described to provide breaking of the isopropylidene ring and 3, 4-cyclisation and if desired converting the compound of formula I to its pharmaceutically accepted acid addition salts by any known method.

(Complete specification 21 pages

Drawing 1 sheet).

CLASS : 32 F 2(c)

160105

Int. Cl. : C 07 c—103/00.

**PROCESS FOR PREPARING AZODICARBONIC ACID DIAMIDE.**

Applicant : SZERVES VEGYIPARI FEJLESZTO KOZOS VALLALAT, OF 1085 BUDAPEST, STARLY UT 13, HUNGARY AND EGYESULTI VEGYIMUVEK, OF 1172 BUDAPEST, CINKOTAI UT 26, HUNGARY, BOTH COMPANIES INCORPORATED UNDER THE LAWS OF HUNGARY.

Inventor : TIBOR WEIN, ENDRE SZIJARTO, GEZA BIRO, LASZLO GASPAS, AND EVA JAKOBA NEE HEJJA.

Application for Patent No. 253/Del/1984 filed on 22 March 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**4 Claims**

A process for the preparation of azodicarbonic acid diamide of the formula  $H_2N-CO-N=N-CO-NH_2$  which comprises intensive mixing 43 to 100 parts of a 30 to 70 per cent aqueous solution of urea and 100 parts of an aqueous solution composed of 130 to 150 g per litre of sodium hypochlorite and 150 to 170 g per litre of sodium hydroxide, heating this mixture to 110 to 130°C by passing it through a heating-zone within 0.1 to 1 minute, and introducing it into a solution which contains 0.76 mole equivalent amount of an inorganic or an organic acid, keeping the temperature of this reaction mixture at a temperature between 130 to 150°C, at a pressure between 2 and 4 bar, and at a hydrogen ion concentration between 7 and 8 pH until a sample of the reaction mixture no longer consumes iodine, then suspending the hydrazodicarbonic acid diamide formed in water and oxidizing the suspended compound to azodicarbonic acid diamide by means of any known method, finally, separating, then washing and drying the final product.

Complete specifications 13 pages.

CLASS : 270I &amp; 98 F

160106

Int. Cl. : E04b 2/00 &amp; 1/74.

**A DEVICE FOR MANUFACTURING FINISHED INSULATING BOARDS.**

Applicant & Inventor : AHN, SE-HONG, OF 519-78, SUYU-DONG, DOBONG-KU, SEOUL, KOREA, A KOREAN CITIZEN.

Application for Patent No. 258/Del/84 filed on 23rd March, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**3 Claims**

A device for manufacturing finished insulating boards within a three dimensional cubic wire mesh for constructional purposes comprising :

a pair of conveyor belts for conveying wires to insulating wires to insulating boards,

a first, second and third horizontal frames being slidably connected to the lower portion of said belts by means for supporting rods.

said third horizontal frames being slidably connected to the upper parts of said belts;

each of said horizontal frames being also connected to a first, second and third air cylinders for slidably moving said frames;

a pair of slanting brackets connected to one of said belts;

said brackets facing each other with same gradient; a stationary base panel fixed to each of said brackets;

a movable panel for moving said insulating boards in a predetermined manner;

said movable panel being slidably mounted on said base panels;

a plurality of wire linear devices for guiding the wires in a straight line and a plurality of wire inserting rods for inserting said wires in said insulating boards.

said wire linear devices and said wire inserting rods being located on the upper part of said movable panel in a straight line;

an operational panel mounted on the movable panel and having the same width as said movable panel and having thereon;

a plurality of chuck means for clamping and restraining the wires;

said chucks being located on said operational panel and spaced at regular intervals in a straight line between the wire inserting rods and wire linear devices;

a plurality of pneumatic cutters connected to said movable panel for cutting the wires after the insertion of the wires into the insulation boards;

said cutters being located at right angles to said wire inserting rods;

a plurality of electric welders for automatically welding the wires to the flat wire mesh on the upper and lower side of the insulating boards;

said welders being regularly spaced apart from each other on the front side of said first and second horizontal frames and on both the front and back sides of said third horizontal frame.

Compl. specn. 17 pages.

Drg. 12 sheets

CLASS : 39 C

160107

Int. Cl. : C 01 b—2/30.

**A PROCESS FOR PRODUCING A GAS STREAM FOR THE SYNTHESIS OF AMMONIA.**

Applicant : FOSTER WHEELER LIMITED, A BRITISH COMPANY, OF FOSTER WHEELER HOUSE, STATION ROAD, READING, BERKSHIRE, ENGLAND.

Inventors : GEOFFREY FREDERICK AND WIESLAW MAREK KOWAL.

Application for Patent No. 275/Del/1984 filed on 28th March, 1984.

Divided out of document No. 154518 (Application No. 552/Del/1980) anti dated to 29th July, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**3 Claims**

A process for producing a gas stream for the synthesis of ammonia comprising providing a gas stream consisting essentially of nitrogen and hydrogen, in which the nitrogen is in excess of 200 mole percent of the quantity required for ammonia synthesis, at a pressure of at least 15 bar, and subjecting the gas stream to a separation stage in which a portion of the nitrogen is condensed to provide a hydrogen-nitrogen stream at a pressure comparable to the pressure prior to the separation stage in which the hydrogen : nitrogen ratio is suitable for ammonia synthesis and a nitrogen stream at a pressure of up to 50 bar.

Compl. specn. 11 pages.

Drg. 2 sheets

CLASS : 34 B &amp; D

160108

Int. Cl. : C 08 b 1/00, 11/00.

**PROCESS FOR PREPARING CELLULOSE DERIVATIVES WITH DESIRED SOLUTION VISCOSITIES.**

Applicant : THE DOW CHEMICAL COMPANY, 2030 DOW CENTRE, ABBOTT ROAD, MIDLAND, MICHIGAN 48640, U.S.A.

Inventors : 1. CLARK WAYNE GIBSON. 2. CARL PRESTON STRANGE.

Application No. 996/Cal/83 filed August 11, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**8 Claims**

An improved process for preparing cellulose derivatives having controlled solution viscosities wherein said cellulose derivative is prepared in a reaction vessel by reacting cellulose pulp with an alkali metal hydroxide and at least one other reagent for about 0.1 to 10 hours and at a temperature of about 20°C to 100°C which reacts with alkali cellulose to form a cellulose derivative said improvement comprising :

- (a) adjusting the concentration of oxygen in the head space of the reaction vessel to a level less than  $10^{-4}$  moles/liter of head space until said quantity of oxygen as measured by analyzing the gases in said head space for oxygen is such that the cellulose derivative prepared in said reaction vessel has a desired solution viscosity of the products prepared are controlled to within 15% of the desired viscosity and then
- (b) preparing the cellulose derivative by reacting cellulose pulp, an alkali metal hydroxide and at least said one other reagent as herein described in said reaction vessel while excluding the entry of substantial amounts of oxygen into said reaction vessel.

Compl. specn. 20 pages.

Drg. Nil

CLASS : 69-I.

160109

Int. Cl. : H 01 h 79/00.

**DEVICE FOR VERIFYING THE INSULATION TO GROUND OF A DISCONNECTING SWITCH WHEN BREAKING A CHARGING CURRENT.**

Applicant : HITACHI, LTD., OF 6, KANDA SURUGADAI 4-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Inventors : 1. TOKIO YAMAGIWA, 2. TOSHIO ISHIKAWA, 3. JUN OZAWA, 4. KAORU ENDO, 5. MASAO HOSOKAWA.

Application No. 1011/Cal/83 filed August 17, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**7 Claims**

A device for testing and verifying a performance of the insulation to ground of a disconnection switch when breaking a charging current, the device comprising a disconnection switch having :

- a moveable electrode and a fixed electrode being arranged in a tank so as to face each other,
- means for moving the moveable electrode so as to dispose the electrodes at a predetermined distance,
- one of the said electrodes being connected to a power supply adapted to generate an electrical potential of predetermined magnitude associated with the said distance,
- the other of the electrodes being connected to an electrostatic capacity load adapted to accumulate and store charge fed to said load due to application of said potential to said other electrode which

causes a discharge across said electrodes, said power supply capable of generating a pulsed electrical potential of opposite polarity to the charge to be stored in said load and applying said electrical potential to said other electrode to thereby cause a second discharge that can be monitored to verify the performance of the insulation to ground of said switch.

Compl. Specn. 26 pages.

Drgs. 5 sheets.

CLASS : 139-A.

160110

Int. Cl. : C 09 c 1/48.

**PROCESS AND APPARATUS FOR PRODUCING CARBON BLACK.**

Applicant : PHILLIPS PETROLEUM COMPANY, OF HARTLESVILLE, STATE OF OKLAHOMA, UNITED STATES OF AMERICA.

Inventors : 1. EULAS WEBB HENDERSON, 2. MARK LEE GRAVLEY.

Application No. 1039/Cal/83 filed August 25, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**12 Claims**

A process for producing carbon black comprising :

flowing a stream of hot combustion gases having a temperature in the range of 2400—3000°F, sequentially through a converging zone, a throat and an abruptly diverging zone; and

introducing the carbonaceous feedstock transversely into the stream of hot combustion gases from the periphery of the stream for decomposition to form the carbon black;

wherein the introduction of the carbonaceous feedstock into the hot combustion gases is :

(a) into the converging zone and/or

(b) into the throat within a distance of about 4 inches from the abruptly diverging zone;

wherein the introduction of the feed under (a) is a coherent stream and/or as a spray and the introduction of the feed under (b) is as a spray.

Compl. Specn. 38 pages.

Drg. 1 sheet.

CLASS : 90-I.

160111

Int. Cl. : C 03 b 35/00.

**A POSITIONING CONTROLLER FOR CONVEYOR IN A GLASS SHEET PROCESSING EQUIPMENT.**

Applicant & Inventor : JOHN STEPHEN NITSCHKE, OF 650 W. FRONT STREET, PERRYSBURG, OHIO 43551, U. S. A.

Application No. 1056/Cal/83 filed August 31, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**4 Claims**

A positioning controller for use in a control system (20) which monitors and controls the processing of sheets of glass in a glass processing system wherein the sheets of glass are conveyed by a main conveyor (16) and an auxiliary conveyor (17) driven by a separate, variable speed drive (21) for conveying the sheets of glass between the main conveyor and the auxiliary conveyor, the control system including a master controller (84) to provide a command signal and the positioning controller (96) for controlling the variable speed drive, said positioning controller comprising first generating means (80) coupled to the main conveyor for generating a first

transport signal corresponding to the distance that the glass sheets are conveyed along the path of conveyance on the main conveyor; and characterized by :

a second generating means (94) coupled to the auxiliary conveyor for generating a second transport signal corresponding to the distance that glass sheets are conveyed along the path of conveyance on the auxiliary conveyor; and

a slave controller (88) for processing the command signal from the master controller and the first and second transport signals from the first and second generating means, respectively, to provide at least one control signal to the variable speed drive to control glass sheet conveyance on the auxiliary conveyor independent of the glass sheet conveyance on the main conveyor.

Compl. specn. 29 pages

Drg. 4 sheets

CLASS : 102-D

160112

Int. Cl. B 65 g 1/00.

#### INSTALLATION FOR HYDRAULICALLY TRANSPORTING OBJECTS.

Applicant : FIBRE DYNAMICS LIMITED, OF 278A LAKE ROAD, TAKAPUNA, AUCKLAND, NEW ZEALAND.

Inventor : 1. GEOFFERY CREME DUFFY.

Application No. : 1312/Cal/83 filed October 25, 1983.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims

An installation for transporting an object (16) comprising an impervious conduit (8) terminating at a delivery end (8a) thereof, a prime mover (7) for causing a flow of liquid along said conduit (8) towards the said delivery end (8a), means (6, 13) for the controlled deposit into the liquid of the object (16) and a supportive material (14) to support the object in the liquid and characterised in ;

(a) that the supportive material (14) is in the form of a network of flexible fibers (14a), and

(b) that there is a separation device (10) to receive the discharge at the delivery end (8a) of the conduit (8) and to separate at least the liquid (15) from the solid (16).

Compl. specn. 17 pages.

Drg. 3 sheets

CLASS : 85-J

160113

Int. Cl. F 22 b 35/00.

#### "AN APPARATUS FOR REDUCING LOSSES IN A COMBUSTION SYSTEM PRODUCING FUEL GASES."

Applicant : THE BABCOCK & WILCOX COMPANY, RESIDING AT 1010 COMMON STREET, P.O. BOX 60035, NEW ORLEANS, LOUISIANA 70160, UNITED STATES OF AMERICA.

Inventors : 1. MARION ALVAH KEYES, 2. MICHAEL PAUL LUKAS, 3. ROBERT EUGENE POCKOCK.

Application No. : 1321/Cal/83 filed October 27, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 2 Claims

An apparatus for reducing losses in a combustion operation for burning fuel with air at a low level with the combustion

operation producing flue gas having unburned by-product, oxygen and at a selected stack temperature, comprising :

a temperature transmitter for measuring the stack temperature ;

an oxygen sensor for sensing unburned oxygen in the flue gas ;

at least one unburned by-product sensor for sensing an amount of unburned by-product in the flue gas ;

an opacity sensor for sensing the opacity of the flue gas ;

means for establishing a load level for the combustion operation which is proportional to a load index thereof ;

a first multiplier connected to the temperature transmitter and oxygen sensor for multiplying the value generated thereby together ;

second multiplier for generating an air heating loss an output of said first multiplier ;

a first cost factor unit connected to an output of said second multiplier for generating an air heating loss value ;

a third multiplier connected between said means and said at least one unburned by-product sensor ;

a second cost factor unit connected to an output of said third multiplier for generating a quantity proportional to an unburned by-product loss for the combustion operation ;

a function generator connected to said opacity sensor for multiplying an amount of opacity sensed by said opacity sensor by an amount which increases to a fine that is exacted for reaching a limit in opacity; a fourth multiplier connected to an output of said function generator and to said means for generating an opacity loss quantity ;

a summing unit connected to an output of said second cost factor unit and said fourth multiplier for generating a total fuel loss for the combustion operation ; and

a loss index minimizing unit connected to an output of said summing unit, and output of said first cost factor unit and to said means for generating an air demand signal at which the fuel loss, the air heating loss, and a summation of the fuel loss plus air heating loss are minimized.

Compl. specn. 13 pages.

Drg. 2 sheets

CLASS : 32-A<sub>1</sub>

160114

Int. Cl. : C 09 b 67/00

#### A PROCESS FOR THE PREPARATION OF A DYEING-STABLE MONOAZO DYESTUFF.

Applicant : HOECHST AKTIENGESellschaft OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

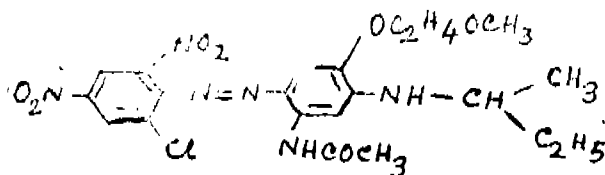
Inventors : 1. KARL SOMMER, 2. MANFRED SCHNEIDER, 3. RUDOLF SCHICKFLUB.

Application No. 1372/Cal/83 filed November 9, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 Claims

A process for preparing the dyeingstable modification ( $\beta$ -modification) of the dyestuff of the formula (I) of the accompanying drawings



Formula (I)

which has the X-ray diffraction diagram shown in Figure 1 and having the characteristic reflections at the following glancing angle  $\theta$  and intensities

$\theta$	2.74	4.27	4.70	5.50	8.74	11.24	12.44
relative intensity	100	72	40	23	27	32	26

which comprises heating a suspension of the dyestuff of said formula (I) of the dyeingunstable  $\alpha$ -modification, which is characterized by the x-ray diffraction diagram of Figure 2, in an organic solvent at temperatures of  $60^\circ$  to  $120^\circ\text{C}$ .

Compl. Specn. 9 pages.  
CLASS : 92-D.

Drg. 2 sheets.  
160115

Int. Cl. : B 02 b 7/00.

## GRAIN HANDLING SYSTEM.

Applicant : SATAKE ENGINEERING CO., LTD., OF 19-10, UENO-1-CHOME, TAITO-KU, TOKYO, JAPAN.

Inventor : I. ZENDO MITSUKAWA.

Application No. 1426/Cal/83 filed November 19, 1983

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 29 Claims

A grain handling system comprising :

at least one flow passage defining means for defining a grain flow passage having an upstream intake end and a downstream discharge end so as to allow the grain to flow along said grain flow passage from said upstream intake end to said downstream discharge end,

valve means disposed in communication with said downstream discharge end of said grain flow passage for controlling the flow rate of the grain discharged from said downstream discharge end;

volumetric weight measuring means for measuring a volumetric weight of the grain delivered toward said valve means to generate a volumetric weight signal;

computer means connected to said volumetric measuring means for receiving the volumetric weight signal therefrom to generate a control signal on the basis of said volumetric weight signal; and

drive means drivingly connected to said valve means and connected to said computer means, said valve means being operative in response to said control signal from said computer means to drive said valve means so as to allow the grain discharged by said valve means to be controlled in terms of weight unit.

Compl. Specn. 44 pages.

Drg. 5 sheets

CLASS : 132-C & 94-G.

160116

Int. Cl. : B 01 f 13/10.

## GRAIN MIXING SYSTEM.

Applicant : SATAKE ENGINEERING CO. LTD., OF 19-10, UENO-1-CHOME, TAITO-KU, TOKYO, JAPAN.

Inventor : I. ZENDO MITSUKAWA.

Application No. 1485/Cal/83 filed December 3, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 17 Claims

A grain mixing system for mixing different kinds of grains, comprising :

a plurality of tanks respectively containing different kinds of grains, each of said tanks having a discharge port;

a plurality of valve means each disposed in communication with the discharge port of the associated tank for controlling a flow rate of the associated grain discharged from the discharge port of the associated tank;

volumetric weight measuring means for measuring volumetric weights of the grains respectively fed to said tanks to generate volumetric weight signals respectively corresponding to the weights of the respective grains;

computer means connected to said volumetric weight measuring means for receiving the respective volumetric weight signals therefrom to generate control signals respectively based on said volumetric weight signals;

a plurality of drive means each drivingly connected to the associated valve means and connected to said computer means, said drive means being respectively operative in response to the control signals from said computer means to respectively drive said valve means so as to allow the respective grains discharged by said valve means to be controlled in terms of weight unit; and

mixing means for mixing the respective grains discharged from said valve means.

Compl. Specn. 25 pages.

Drg. 4 sheets.

CLASS : 69-M.

160117

Int. Cl. : H 01 h 5/10.

CONSTANT LOAD SNAP ACTION SWITCH WITH MANUAL OR AUTOMATIC RESET, STOP AND TEST SELECTION.

Applicant : EATON CORPORATION, AT 100 ERIEVIEW PLAZA, CLEVELAND, OHIO 44114, UNITED STATES OF AMERICA.

Inventors : 1. KENNETH H ARTHUR FORSEIL. 2. FENWARD ARTHUR MALLONEN.

Application No. 1528/Cal/83 filed December 15, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 15 Claims

A constant load and constant force snap-action switch comprising :

an insulating housing;

normally-closed contacts in said housing comprising a stationary contact and a movable contact operable to open and closed states with respect to said stationary contact;

external terminals;

means connecting said stationary contact to one of said external terminals;

a snap-action flipper blade in said housing connecting said movable contact to another one of said external terminals and being operable in response to a force applied thereto for causing snap-action tripping of said movable contact at the toggle point of said flipper blade from said normally-closed state to said open state;

means extending into said housing and operable through a trip stroke to transmit a trip force to said flipper blade;

and means for maintaining the required trip force applied by said trip means substantially constant through a significant portion of said trip stroke to said toggle point comprising:

a bias spring mounted in said housing for applying a bias to said flipper blade such that the required trip force through a significant portion of said trip stroke remains substantially constant.

Compl. Specn. 22 pages.

Drg. 6 sheets.

CLASS : 116 C

160118

Int. Cl. : B 65 g 15/20

EN-MASS CONVEYOR FOR VERTICAL OR STEEP DELIVERY OF BULK MATERIAL.

Applicant : M.A.N. MASCHINENFABRIK AUGSBURG-NURNBERG AKTIENGESellschaft, A GERMAN COMPANY OF POSTFACH 440100, 8500 NURNBERG 44, WEST GERMANY.

Inventors : (1) Gunther Tschermatsch and (2) Peter Kurz.

Application No. 153/MAS/84 filed March 12, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

#### 1 Claim

En-mass conveyor for vertical or steeply inclined delivery of bulk material with a first endless belt conveyor having flights or similar impellers, which are fixed to the outer side of the belt and aid the conveyance of bulk material, with a second endless belt conveyor which is arranged parallel to the first belt conveyor in the area of vertical delivery and running at the same speed in a direction opposite to that of the first conveyor and with two side closures which in conjunction with the belt conveyors and the flights or similar impellers form boxshaped, enclosed delivery spaces subdivided into regular longitudinal sections by the flights or similar impellers and with a device for feeding the bulk material to the belt conveyor, characterized in that the two belt conveyors in the section where bulk material is fed extend vertically or steeply inclined throughout as hereinbefore described and are formed as flat belts without side elements, in that the lateral closures are formed by two separate endless flat belts and depending on whether bulk material feeding is from one side or from both sides one or two side walls which are vertically immovable relative to the conveyors and secured to the conveyors supporting structure and which side walls are provided with an opening or openings for lateral filling of the bulk materials, the side wall or side walls and the flat belts being arranged at relative vertical positions so that a complete delivery shaft section corresponding to the pitch of the flights or similar impellers is formed before the bulk material enters this section via the filling opening or filling openings.

Compl. Specn. 10 pages.

Drgs. 3 sheets.

CLASS : 36 A, 3.

160119

Int. Cl. G.01 1 5/12.

"A METHOD OF PRODUCING A GUIDE VANE RING FOR A RETURN FLOW PASSAGE IN AXIAL FANS".

Applicant : Flakt Aktiebolag, of Box 81001, S-104 81 STOCKHOLM, Sweden; a Swedish Body Corporate.

Inventors : 1. SUNE KARLSSON, 2. TORVALD HOLMOVIST.

Application No. 160/Mas/84 filed March 13, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

#### 8 Claims

Method of producing a guide vane ring for a return flow passage in axial fans, characterized in that separate, longitudinally oriented slits (14) are made in a metal strip (12). a cut (22) is made transversely to the strip, between each slit (14) and one long edge (18) of the strip, the portions (20) of the strip thus cut loose being bent out of the plane of the strip and formed to a desired configuration, subsequent to which said formed strip portions are folded such that the transverse cut lines will extend substantially, at right-angles to the unformed flat strip portion, and in that said flat strip portion is cut to desired length, shaped and joined together to form a circular ring (3) with the formed strip portions serving as exterior guide vanes (7).

Compl. Specn. 7 pages.

Drgs. 2 sheets.

CLASS : 70 B [LVIII (5)].

160120.

Int. Cl. : B 01 k 3/04.

UNITARY CENTRAL CELL ELEMENT FOR FILTER PRESS ELECTROLYSIS CELL STRUCTURE.

Applicant : THE DOW CHEMICAL COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A. OF 2030 DOW CENTER, ABBOTT ROAD, MIDLAND, MICHIGAN 48640, U.S.A.

Inventor : GREGORY JEAN ELDON MORRIS, RICHARD NEAL BEAVER, SANDOOR GROSSHANDLER, HIEP DINH DANG, JOHN REX PIMLOTT.

Application No. 229/MAS/84, filed April 2nd, 1984.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules 1972) Patents Office Branch, Madras.

#### 15 Claims

A cell element used in forming a bipolar electrode-type, filter press-type electrolytic cell unit, which unit is capable of being combined with other cell units to form a cell series; wherein in said series the cell element is separated from adjacent cell element by ion-exchange permselective membranes which are sealably disposed between each of the cell element so as to form a plurality of cells; each of said cells having at least one membrane separating the anolyte and catholyte compartments of each cell; said cell element having a central barrier which physically separates an anolyte compartment located on one side of the barrier from a catholyte compartment located on the opposite side of the barrier; said central barrier having an anode positioned in its adjacent anolyte compartment and a cathode positioned in its adjacent catholyte compartment; said central barrier having the anode of the adjacent anolyte compartment electrically connected through it to the cathode of the adjacent catholyte compartment which are adjacent to the central barrier having a peripheral structure around their periphery to complete the physical definition of said compartments; said cell element also having an electrical current conducting means associated with it for providing electrical current paths through the central barrier from its adjacent catholyte compartment to its adjacent anolyte compartment; and which cell structure includes anode and cathode standoff means for maintaining the anode and cathode of the two electrolysis cells adjacent the central barrier at predetermined distances from the central barrier; characterized in that the central barrier, the anode and cathode stand-off means, and at least part of the electrical current transfer means are integrally formed into a unitary central cell element made from a single casting of a castable material;

said anode stand-off means and that part of the electrical current connecting means located in the unitary central cell element on the anolyte side of the central barrier being combined into a multiplicity of anode bosses projecting a predetermined distance outwardly from the central barrier into the anolyte compartment adjacent the central barrier, said anode bosses being capable of being mechanically and electrically connected either directly to the anode of said anolyte compartment or indirectly to said anode through at least one compatible metal intermediate directly positioned between said anode and said anode bosses; and



said cathode stand-off means and that part of the electrical current connecting means located on the catholyte side of the central barrier being combined into a multiplicity of cathode bosses projecting a predetermined distance outwardly from central barrier into the catholyte compartment adjacent the central barrier, said cathode bosses being capable of being mechanically and electrically connected either directly to the cathode in said adjacent catholyte compartment or indirectly to the cathode through at least one compatible metal intermediate directly positioned between said cathode and said cathode bosses; and

said anode bosses being spaced apart in a fashion such that anolyte can freely circulate throughout the totality of the otherwise unoccupied adjacent anolyte compartment, and, likewise, said cathode bosses being spaced apart in a fashion such that catholyte can freely circulate throughout the totality of the otherwise unoccupied adjacent catholyte compartment.

Compl. Specn. 43 pages.

Drgs. 4 sheets.

CLASS : 144C.

160121.

Int. Cl. : C 09 d 5/26.

A HEAT SENSITIVE COLOR-PRODUCING MULTI-LAYER COATED SUBSTRATE & A METHOD FOR PREPARING THE SAME.

Applicant : TEESPORT LIMITED OF 2606 ALEXANDRA HOUSE, 16-20 CHATER ROAD, HONG KONG, AN AUSTRALIAN COMPANY.

Inventor : 1. ARTHUR KEITH PHILPETT. 2. GORDON HAROLD POOLE.

Application for Patent No. 252/Mas/84 dated 10th April 1984.

Convention Date on 11th April 1983. No. PF. 8810/83. (Australia).

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) The Patent Office, Madras Branch.

#### 15 Claims

A heat sensitive color-producing multi-layer coated substrate comprising :

(a) a substrate having

(b) a base coating layer formed from a non-aqueous quick drying base polymeric coating composition comprising :

(i) an alcohol solution of a known ketone resin,

(ii) a source of polyvalent metallic ions having a standard reduction potential greater than one-tenth of a volt,

(iii) at least one fatty acid or non-metallic derivative thereof, and

(iv) an alcohol,

(c) a second coating layer, on the base coating layer, formed from a non-aqueous, quick drying sensitizing coating composition comprising :

(i) an alcohol solution of a known ketone resin,

(ii) at least one fatty acid or non-metallic derivative thereof, and

(iii) a reducing agent selected from catechol, pyrogallol, hydroquinone, diphenyl carbazides, gallic acid esters including athyl gallate, propyl gallate and lauryl gallate; and derivatives thereof, and

(d) a third coating layer, on the second coating layer, formed from the non-aqueous quick drying base polymeric coating composition in (b).

Compl. Specn. 37 pages.

Drg. 4 sheets.

3—127GI/87

CLASS : 182 C.

160122.

Int. Cl. : C 13 f 1/02.

PROCESS FOR THE CONTINUOUS PRODUCTION OF SUGAR CRYSTALS FROM SUGAR JUICES BY VACUUM EVAPORATION.

Applicant : FIVES CAIL BABCOCK, OF 7 RUE MONTALIVET, 75383 PARIS, CEDEX 08, FRANCE; AND SUCRERIE & DISTILLERIE DE SOUPPLESOUVRE FILS S.A., A FRENCH NATIONALITY, OF 77460 SOUPPES-SUR-LING, FRANCE.

Inventors : (1) PAUL CREDOZ AND (2) PHILIPPE DE BODARD.

Application No. 494/MAS/84 filed July 9, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

#### 9 Claims

A process for producing sugar crystals from a sugar solution which comprises feeding a continuous evaporation crystallisation apparatus with a magma formed by a mixture of syrup and crystals, introducing the under-saturated sugar solution from which the crystals are to be produced into this apparatus at various points spaced out between the inlet and the outlet of the apparatus, heating the under-saturated sugar solution mixed with magma in said apparatus to over-saturation, drawing off from the said apparatus a massecuite which is subjected to centrifuging in order to separate the crystals from the mother liquid, and refining the separated crystals by mixing them with a syrup of a purity greater than that of the mother liquid and centrifuging this mixture in order to separate the refined crystals from the refining syrup, the said magma is formed by mixing in a paste mixer said refining syrup with crystals coming from the de-dusting device (24) of a sugar drying installation.

Compl. Specn. 14 pages.

Drgs. 3 sheets.

CLASS : 13A.

160123.

Int. Cl. : B 65 d 85/00.

AN APPLICATOR FOR USE IN PEST CONTROL.

Applicant : DR. WERNER FREYBERG CHEMISCHE FABRIK, OF DELITTA NACHF, 6947 LAUDENBACH, FEDERAL REPUBLIC OF GERMANY, A GERMAN COMPANY.

Inventors : (1) Wolfgang Friemel and (2) REINER EHRET.

Application No. 521/MAS/84 filed July 18, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

#### 41 Claims

An applicator for use in pest control comprising :

a first layer of fabric and

a second layer of fabric welded to the first layer of fabric along weld lines defining a sachet in-between them for accommodating a pest control agent, the fabric of at least one of the layers being composed at least in part of a gas—and water-vapour permeable substantially anhydrous non-woven composition, the said composition including a first material in the form of natural, synthetic or man-made fibres having a melting or softening temperature above 165°C, and a second material of hydrocarbon origin having thermoplastic properties and a melting or softening temperature between 60°C and 45°C, the amount of second material not exceeding 50% by mass of the composition,

whereby, upon the application of heat along the weld lines so as to increase the temperature of the composition to above the melting or softening temperature of the second material, the second material of the composition is caused to be welded to first material of the composition and to the fabric of the other layer.

Compl. Specn. 31 pages.

Drg. 2 sheets.

CLASS : 32 F 3 (b).

160124

Int. Cl. C 07 c 67/00.

**"PROCESS FOR THE PREPARATION OF ALPHA AROMATIC GROUP SUBSTITUTED ALKANOIC ACID OR ESTERS THEREOF".**

Applicant : SYNTEX PHARMACEUTICALS INTERNATIONAL LIMITED, a Bermuda Corporation, of Corner House, Church Street, Hamilton, Bermuda.

Inventors : 1. GENCHI TSUCHIHASHI. 2. SHICHI MITMURA. 3. KOUJI KITAJIMA.

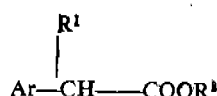
Application for Patent No. 568/Mas/84 filed on 4th August, 1984.

Division of Application No. 1023/Cal/81 dated 10th September 1981. No. 155 107.

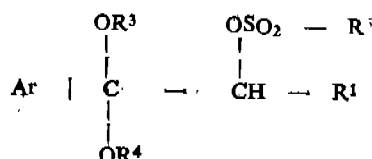
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

**18 Claims.**

A process for preparing an alpha-aromatic group substituted alkanolic acid or its esters of the general formula



wherein Ar represents an aromatic group and  $R^1$  represents a hydrogen atom or a saturated aliphatic group, or Ar and  $R^1$  may form a condensed ring together with the carbon atom to which they are bonded; and  $R^2$  represents a hydrogen atom, an alkyl group, or a hydroxyalkyl group, characterized in that an alpha-sulfonyloxyketone acetal of the general formula



wherein  $R^3$  and  $R^4$ , independently from each other, represent an alkyl group, or taken together, represent an alkylene group;  $R^5$  represents a substituted or unsubstituted alkyl group or an aromatic group; and Ar and  $R^1$  are as defined above. is treated with an agent such as herein described having affinity for oxygen, and thereafter isolating the ester compound of Formula I in a conventional manner and, if desired, converting it into acid form by methods known per se.

Compl. Specn. 18 pages.

Drg. Nil.

CLASS : 32 F2(b) AND 55 D2

160125

INT. CL. : C 07 d 29/40 &amp; A 01 n 9/22

**A PROCESS FOR PREPARING SUBSTITUTED DIHYDROPYRIDINE ISOMERS.**

Applicant : MONSANTO COMPANY, a Delaware Corporation, residing at 800 North Lindbergh Boulevard, St. Louis, Missouri 63167 United States of America.

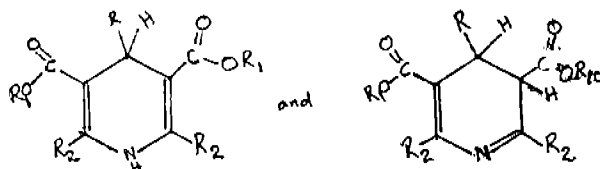
Inventor : LEN FANG LEE

Application No. 597/MAS/84 filed August 10, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

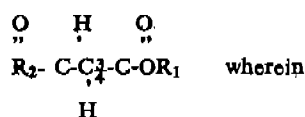
**7 Claims**

A process for preparing substituted dihydropyridine isomer of the formulae shown in Fig. 9.



wherein R is selected from the group consisting of phenyl, alkyl,  $C_{3-6}$  cycloalkyl,  $C_{1-6}$  haloalkyl,  $C_{1-6}$  aralkoxyalkyl,  $C_{1-6}$  aryloxy alkyl,  $C_{1-6}$  alkoxyalkyl,  $C_{1-6}$  alkylthioalkyl,  $C_{1-6}$  hydroxyalkyl,  $C_{1-6}$  alkylcarbonyloxyalkyl,  $C_{1-6}$  cyclo-alkanylalkyl and  $C_{3-6}$  heterocyclic radicals as herein before described in which the hetero atom is selected from nitrogen, sulphur and oxygen;  $R_1$  is independently selected from  $C_{1-4}$  lower alkyl radicals and  $R_2$  is fluorinated methyl radicals, comprises the steps of :

(1) reacting lower alkyl 3-Ketoester represented by the formula



$R_1$  and  $R_2$  are defined above, with an aldehyde represented by the formula :



wherein R is defined above;

(2) passing a reactant selected from ammonium hydroxide and gaseous ammonia through the reaction product of step (1) in the presence of an aprotic inert solvent to provide a dihydroxypiperidine and

(3) dehydrating said dihydroxypiperidine with dehydrating agent and distilling the same to provide dihydropyridine isomers.

Compl. specn. 64 pages

Drg. 2 sheets

CLASS : 32 F2(b) and 55 D2

160126

INT. CL. : C 07 d 29/12 and A 01 n 9/22

**A PROCESS FOR THE PREPARATION OF SUBSTITUTED PIPERIDINE COMPOUND.**

Applicant : MONSANTO COMPANY, a Delaware Corporation, residing at 800 North Lindbergh Boulevard, St. Louis Missouri 63167 United States of America.

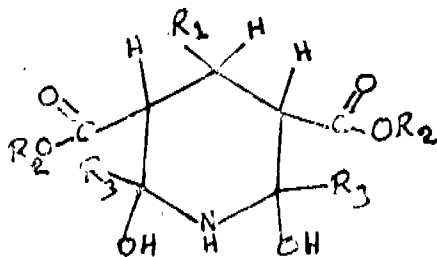
Inventor : LEN FANG LEE

Application No. 599/MAS/84 filed August 10, 1984.

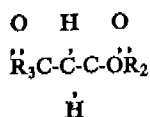
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

## 5 Claims

A process for the preparation of a novel herbicidal compound of the formula given in Fig. 1.



of the accompanying drawings wherein  $R_1$  is selected from the group consisting of hydrogen,  $C_{1-5}$  alkyl, phenyl, phenyl methyl  $C_{2-4}$  alkoxyalkyl,  $C_{2-3}$  alkylthioalkyl,  $C_{3-6}$  cycloalkyl, and substituted or unsubstituted furyl and substituted or unsubstituted thienyl;  $R_2$  is a  $C_{1-2}$  alkyl radical and  $R_3$  represents a  $C_{1-4}$  fluoralkyl radical which comprises reacting a 3-ketoester of the formula



with an aldehyde of the formula  $R_1\text{CHO}$  in the liquid phase in an aprotic solvent in the presence of 0.1 to 1.0 weight percent of piperidine as a catalyst at a temperature of  $40^\circ\text{C}$  upto the reflux temperature of the liquid phase to form a pyran having the same  $R_1R_2$  and  $R_3$  substituents, and then contacting the said pyran with gaseous ammonia to form the piperidine compound of Fig. 1.

Compl. spec. 37 pages

Drg. 1 sheet.

CLASS. 55 D 2

160127

INT. CL. A01 n 9/00

# METHOD OF PREPARING A HERBICIDAL COMPOSITION.

STAUFFER CHEMICAL COMPANY, a Corporation organized under the laws of the state of Delaware, U.S.A., of Westport, Connecticut 06881, U.S.A.

Inventors : ALICE ULHEE HAHN

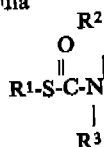
CANDICE WEI-HSING HUANG

Application No. : 713/MAS/84 filed 19th September 1984.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

## 7 Claims

A method of preparing a herbicidal composition comprising the steps of (a) impregnating a porous granule with a herbicidally effective amount of a thiocarbamate herbicide of the formula



in which

$R_1$  is selected from the group consisting of  $C_1-C_6$  alkyl,  $C_2-C_6$  alkenyl, phenyl, and benzyl, all optionally substituted

with one or more members selected from chlorine and  $C_1-C_3$  alkyl; and

$R_2$  and  $R_3$  either independently form  $C_1-C_6$  alkyl or  $C_3-C_7$  cycloalkyl, or conjointly form  $C_3-C_7$  alkylene; and (b) coating the granule with a coating material selected from.

(i) conventionally cured glyceride of one or more unsaturated  $C_{10}-C_{24}$  aliphatic acids, and an antioxidant or

(ii) conventionally cured mono-or polycyclopentadiene copolymers of a glyceride of one or more unsaturated  $C_{10}-C_{24}$  aliphatic acids and an antioxidant such as herein described, the coating comprising from 1% to 30% by weight of the composition, of which the antioxidant comprises from 0.1% to 0.8% by weight of the composition.

Compl specn 15 Pages

Drg. Nil

CLASS : 83 B2 & 61 B

160128

INT. CL. 23 1 1/08, 3/00

# A PROCESS AND APPARATUS FOR PREPARING HONEY HAVING A LOW WATER CONTENT FROM CRUDE HONEY.

CHEVRON RESEARCH COMPANY, a corporation duly organized under the laws of the State of Delaware, United States of America, of 525 Market Street, San Francisco, California, U.S.A.

Inventor : JAMES L. PLATT 2. JOHN R. B. ELLIS.

Application No. 12/MAS/84 filed in 6 January 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Madras Branch.

## 14 Claims

A process for preparing honey having a water content of below 18% by weight from crude honey comprising the steps of :

filtering said crude honey to remove beehive bodies, comb debris and form a filtered honey :

contacting said filtered honey as a thin film with a non-turbulent stream of air having a temperature of from  $40^\circ\text{C}$  to  $75^\circ\text{C}$  at a velocity of less than 5 meters per second, for a time sufficient to reduce the water content and form a dried honey having a water content of below 18% by weight, and removing in a known manner said dried honey.

An apparatus for preparing honey having a water content of below 18% by weight comprising a housing for holding the honey, a horizontally positioned rotatable shaft within said housing having a rotatable body with high surface area mounted therein means for adding honey to and removing honey from said housing, and means for rotating said shaft and said high surface area body.

Compl. Specn. 11 Pages.

Drg. 2 Sheets.

CLASS : 32F3(b)

160129

INT. : C 07 c 103/52

# A PROCESS FOR THE PREPARATION OF A PEPTIDE AND ITS NONTOXIC SALTS.

Applicant : THE SALK INSTITUTE FOR BIOLOGICAL STUDIES, a corporation organized under the laws of the State of California, United States of America, of 10010 North Torrey Pines Road, La Jolla, California, 92037, United States of America.

Inventors : (1) Jean Edouard Frederic Rivier (2) Wylie Walker Vale, JR., (3) Joachim Spiess.

Application No. 17/MAS/84 filed January 12, 1984.

Appropriate office for opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office, Madras Branch.

#### 11 Claims

A process for the preparation of a peptide and its nontoxic salts of the formula (I) :

H-R<sub>1</sub>-Ala-Asp-Ala-Ile-Phe-Thr-R<sub>8</sub>-Ser-R<sub>10</sub>-Arg-R<sub>12</sub>-R<sub>13</sub>-Leu-R<sub>15</sub>-Gln-Leu-R<sub>18</sub>-Ala-Arg-Lys-Leu-Leu-R<sub>24</sub>-R<sub>25</sub>-Ile-R<sub>27</sub>-R<sub>28</sub>-Arg-Gln-Gln-Gly-Glu-R<sub>34</sub>-Asn-Gln-Glu-R<sub>38</sub>-R<sub>39</sub>-R<sub>40</sub>-Arg-R<sub>42</sub>-R<sub>43</sub>-R<sub>44</sub>-Y, wherein

R<sub>1</sub> is Tyr, Met, D-Tyr, Phe, D-Phe, Leu, D-His, or His; R<sub>8</sub> or Ser or Asn; R<sub>10</sub> is Tyr, Phe or D-Tyr; R<sub>12</sub> is Arg or Lys; R<sub>13</sub> is Ile or Val; R<sub>15</sub> is Gly or D-Ala; R<sub>18</sub> Tyr or Ser; R<sub>24</sub> is His

or Gln; R<sub>25</sub> is Glu or Asp; R<sub>27</sub> is selected from group consisting of the D- and L-isomers of Ala, Leu, Ile, Leu, Met and Val; R<sub>28</sub> is Ser, Asn or D-Ala; R<sub>34</sub> is Arg or Ser; R<sub>38</sub> is Gln or Arg; R<sub>39</sub> is Arg or Gly; R<sub>40</sub> is Ser or Ala; R<sub>42</sub> is Phe or Ala; R<sub>43</sub> is Asn or Arg; R<sub>44</sub> is a natural amine acid such as herein described or des-R<sub>44</sub>; and; Y signifies the carboxyl moiety of the amine acid residue at the C-terminus and is the radical COOR, -CRO, -CONHNH, -CON(R) (R) or -CH<sub>2</sub>OR, with R and R<sub>8</sub> being lower alkyl, fluoro lower alkyl or hydrogen, provided that when R<sub>1</sub> is Tyr, then R<sub>27</sub> is other than Met, R<sub>8</sub> is Ser, R<sub>12</sub> is Arg, is Ile, R<sub>18</sub> is Tyr, R<sub>24</sub> is His, R<sub>25</sub> is Glu, R<sub>28</sub> is Asn, R<sub>34</sub> is Arg, R<sub>38</sub> is Gln, R<sub>39</sub> is Arg, R<sub>40</sub> is Ser, R<sub>42</sub> is Phe or R<sub>43</sub> is Asn; or a nontoxic salt of the foregoing; comprising (a) forming a peptide by methods as herein described having at least one protective group and of the formula (II) :

X<sup>1</sup>R<sub>1</sub>-(X or X<sup>2</sup>)-Ala-Asp-(X<sup>3</sup>)-Ala-Ile-Phe-The (X<sup>4</sup>)-R<sub>8</sub> (X<sup>4</sup> or X<sup>5</sup>) Ser (X<sup>4</sup>)-R<sub>18</sub>(X<sup>2</sup>)-Arg(X<sup>6</sup>)-R<sub>12</sub>(X<sup>6</sup> or X<sup>7</sup>)R<sub>13</sub> Leu -R<sub>15</sub>-Gln-(X<sup>5</sup>)

Leu-R<sub>18</sub> (X<sup>2</sup>)-Ala-Arg (X<sup>6</sup>)-Lys (X<sup>7</sup>)-Leu-Leu-R<sub>24</sub>(X or X<sup>5</sup>)-R<sub>25</sub>(X<sup>3</sup>)-Ile-R<sub>27</sub>-R<sub>28</sub> (X<sup>4</sup> or X<sup>5</sup>)-Arg (X<sup>6</sup>)-Gln (X<sup>5</sup>)-Gln (X<sup>5</sup>)-Gly-Glu-(X<sup>3</sup>)-R<sub>34</sub> (X<sup>4</sup> or X<sup>6</sup>)-Asn (X<sup>3</sup>)-Gln (X<sup>5</sup>)-Glu (X<sup>3</sup>)-R<sub>30</sub> (X<sup>5</sup> or X<sup>6</sup>)-R<sub>39</sub> (X<sup>6</sup>)-R<sub>40</sub> (X<sup>4</sup>)-Arg (X<sup>6</sup>)-R<sub>42</sub>-R<sub>43</sub> (X<sup>5</sup> or X<sup>6</sup>) R<sub>44</sub> (X<sup>8</sup>)-X<sup>9</sup> wherein X, X<sup>1</sup>, X<sup>2</sup>, X<sup>3</sup>, X<sup>4</sup>, X<sup>5</sup>, X<sup>6</sup>, X<sup>7</sup>, and X<sup>8</sup> are each either hydrogen or a known protective group and X<sup>9</sup> as either a respective group or an anchoring bond to resin support or des-X<sup>9</sup>, in which case the residue at the C-terminal has a carboxy moiety which is Y; (b) splitting off the protective group or groups or anchoring bond from said peptide of the formula (II) by known methods and (c) if desired, converting a resulting peptide into a nontoxic salt thereof in any known manner.

Comp. specn. 34 pages

Drg. Nil.

CLASS : 206 E

160130

INT. CL. G01 r 23/02, 23/16.

APPARATUS FOR ANALYZING A SIGNAL WAVEFORM.

Applicant : AURETINA PATENT MANAGEMENT CORP., of 575 Madison Avenue, New York, U.S.A.; A Corporation of the State of New York, U.S.A.

Inventor : JOHN K. BATES.

Application No. 44/MAS/84 filed 27th January 1984.

Appropriate office for opposition proceeding (Rule 4, Patent Rules, 1972) Patent Office, Madras Branch.

#### 6 Claims

Apparatus for analyzing a signal waveform comprising :

Periodicity means for detecting the time of occurrence of individual repetitions of a predetermined type within a periodic event in said signal waveform and for providing in response thereto a periodicity signal corresponding to the period of said periodic event,

residue means for providing upon the occurrence of a predetermined feature of said signal waveform a normalized signal bearing a predetermined relation to said signal waveform, and

utilization means coupled to said periodicity means and said residue means for providing an output signal based on the contemporaneous values of said normalized signal and said periodicity signal.

Compl. Specn. 74 Pages,

Drg. 27 Sheets.

CLASS : 39 L

160131

INT. CL : C 01 f 11/06.

"PROCESS FOR THE PRODUCTION OF CALCIUM OXIDE OR QUICKLIME FROM POWDERED LIME SLUDGE".

Applicant : Andhra Oil & Cake Products limited, of 43—20—25 A, Venkatarajunagar, Dondaparthi, Viskhapattanam, 530016, Andhra Pradesh, India.

Inventor : NATERI KALIDAS 2. NATERI BHANU-MATHIDAS.

Application for Patent No. 104/Mas/84, filed on 18th February 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

#### 6 Claims

A process for the production of calcium oxide or quicklime of high purity which comprises fluidising powdered lime-sludge in a fluidising medium of hot air, subjecting said fluidised sludge to calcination in at least one calcination zone whereby said sludge is progressively decarbonised, removing instantly from said calcination zone the carbon dioxide generated by said calcination to maintain a low partial pressure of carbon dioxide of up to 0.8 atmosphere in said at least one zone, said low partial pressure of carbon dioxide being effective to limit the calcination temperature to a temperature of from 780°C to 920°C., and recovering in any known manner the converted calcium oxide.

Compl. Specn. 14 pages.

Drg. 2 Sheets.

CLASS : 56 E

160132

INT. CL : B 01 d 3/14.

"APPARATUS FOR FRACTIONAL DISTILLATION UNDER VACUUM".

Applicant : SHELL INTERNATIONALE RESEARCH MATSCHAPPIJ B.V., A NETHERLANDS COMPANY OF CAREL VAN BYLANDT/LAAN 30, 2596 HR THE HAGUE, THE NETHERLANDS.

Inventors : 1. DIRK KANBIER 2. ALFRED LOUIS VAN KLEEF.

Application for Patent No. 114/Mas/84 filed on 21st February 1984.

Convention Date on 23rd February, 1983, /8305016/(U.K.)

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Madras.

## 13 Claims

Apparatus for the fractional distillation of a liquid under vacuum, comprising a vertical evacuable vessel enclosing a first zone for liquid to be distilled, a second zone for distillate and a third zone for residue, inlet means for supplying the liquid into the first zone, outlet means for discharging distillate and residue from the second zone and the third zone, respectively wherein the interior of the vessel is provided with a plurality of vertical tubular evaporator elements, each having a rotation-symmetrical inner evaporator surface, each element being provided with means at or near its upper and for directing the liquid to be distilled from the first zone to the upper part of its inner evaporator surface, each element concentrically surrounding at least partly a vertically extending cooling surface each element being further provided with means for separately discharging distillate-condensed on the cooling surface—and residue—not vaporized from the inner evaporator surface—into the second zone and the 3rd zone respectively.

Compl. Specn. 13 Pages.

Drgs. 4 sheets.

CLASS : 39 L

160133

INT. CL. C 01 g 49/00

"PROCESS FOR PREPARING MICACEOUS IRON OXIDE."

Applicant : MINERAL PROCESS LICENSING CORPORATION BY, a company organized under the laws of The Netherlands, of 62 Lange Voorthout, 2514 EH The Hague, The Netherlands.

Inventors : 1. ROY DAVID LAUNDON 2. ANTHONY JOHN WICKNES. 3. JOHN HARRY WALLICE.

Application for Patent No. 121/Mas/84 filed on 22nd February 1984.

Convention Date on 24th February 1983, Nos./8305145 & 8305146/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

## 8 Claims

A process for the preparation of micaceous iron oxide which comprises subjecting metallic iron to a reaction to form an iron chloride, subjecting the resulting iron chloride to oxidation with oxygen or an oxygen-containing gas at a temperature of from 500°C to 1000°C in the presence of at least one salt of an alkali metal or alkaline earth metal wherein the salt; iron weight ratio is within the range of 0.25 : 1 to 10:1, and recovering the micaceous iron oxide formed by known means.

Compl. Specn. 31 pages.

Drgs. 3 sheets.

CLASS : 22

160134

Int. Cl. : B65d 61/00.

A THERMOPLASTICS CONTAINER HAVING A BODY WITH A STANDING BASE.

Applicant : METAL BOX p.l.c., a British Company, of Queens House, Forbury Road, Reading RG1 3JH, Berkshire, England.

Inventors : JOHN FRANCIS EDWARD ADAMS, PHILIP JOHN GOWLAND PROFFIT, NICHOLAS ROY OAKLEY, RICKWORTH FOLLAND.

Application No. 138/MAS/84 filed 2nd March 1984.

Appropriate Office for opposition proceeding (Rule 4, Patent Rules 1972) Patent Office Madras Branch.

## 13 Claims

A thermoplastics container having a body with a standing base, the base being formed with a central recess and a standing ring having an outer wall (17) and an inner wall

(18) joined with an inverted crest which defines the periphery of the recess, for controlling distortion of the base against internal pressure of the container, the container further comprising a ring member which receives the crest generally in nested relation so as to be in the cooperation with the base both within the crest and outside the crest when the container is pressurised, the ring member being bonded to the base outside the crest but within the crest being free of the base so that the base is movable relative thereto, and into engagement therewith, when the container is pressurised.

Compl. Specn. 13 pages.

Drgs. 3 sheets.

CLASS : 83 B5 and 143 D 3 &amp; 4.

160135

Int. Cl. B65b 55/00.

PROCESS FOR THE PRODUCTION OF PACKAGED BAKED PRODUCTS, DOUGH PRODUCTS OR THE LIKE.

Applicant : DYNAMIT NOBEL AKTIENGESellschaft OF POSTFACH 1209, 5210 TROISDORF WEST GERMANY, A COMPANY ORGANIZED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY.

Inventor : Dr. HANS LEO HULSMANN.

Application No. 156/MAS/1984, filed on 12th March, 1984.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, Madras.

## (2 Claims)

Process for the production of packaged baked products, dough products or the like characterised in that the essentially sterile packaged baked products, dough products or the like are dipped in a covering material based on mixed glycerides of acetic acid and fatty acids with 12 to 22 carbon atoms and hydroxyl numbers 15 to 180 liquefied by melting, or optionally sprayed therewith, and the covering material solidifies at reduced temperature to a closed sealing—in.

Compl. Specn. 10 pages.

Drg. 1 sheet.

CLASS : 127A, 134B.

160136

Int. Cl. : F16d 13/00.

A FRICTION ELEMENT DISPOSED FOR MOUNTING TO A ROTATABLE CLUTCH DISC.

Applicant : DANA CORPORATION of 4500 Dorr Street, Toledo, Ohio 43615 U.S.A., a Corporation of the State of Virginia, U. S. A.

Inventor : Mick G. Cameron.

Application No. 166/MAS/84 filed 14 March 1984.

Appropriate Office for opposition proceeding (Rule 4, Patent Rules 1972) Patent Office, Madras Branch.

## 10 Claims

A friction element disposed for mounting to a rotatable clutch disc having a center of rotation, said element comprising an arcuate friction facing having radially extending leading and trailing edges, said facing having a first circumferentially extending centerline which defines an arc extending between said leading and trailing edges, said facing further having a radially outer and a radially inner subportion, each subportion radially spaced from said centerline, each subportion being both circumferentially and radially symmetrical and having second and third, respectively, circumferentially extending centerlines parallel to said interjacently positioned first centerline, said second and third centerlines of said respective subportions defining spaced areas coterminous with said radially extending edges of said facing and two lines extending radially from said center of rotation, said arcs defined by said second and third centerlines of said subportions extending over a greater angle than said arc defined by said interjacent first centerline.

Compl. Specn. 15 pages.

Drgs. 2 sheets.

CLASS : 32 E.

160137

INT. CL. C 08 F 3/00.

# A CONTINUOUS PROCESS FOR THE PREPARATION OF LOW DENSITY, LOW MODULUS ETHYLENE COPOLYMERS IN A FLUIDIZED BED.

Applicant : UNION CARBIDE CORPORATION, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF NEW YORK, OF OLD RIDGEBURY ROAD, DANBURY, STATE OF CONNECTICUT 06817, UNITED STATES OF AMERICA.

Inventors : FREDERICK JOHNKAROL 2. ISAAC JACOB LEVINE. 3. KATHLEEN FRANCES GEORGE.

Application No. : 206/MAS/84 Filed 28th March 1984.

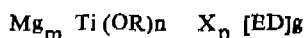
Appropriate office for opposition proceeding (Rule 4, Patent Rules 1972) Patent Office, Madras Branch.

## (15 CLAIMS)

A continuous process for producing low density low modulus ethylene copolymers having a density of less than 0.91 g/cm<sup>3</sup> and a 1% secant modulus of less than 140,000 kPa in a fluidized bed without particle agglomeration.

said copolymers containing no more than 94 mol percent of polymerized ethylene and at least 6 mol percent of polymerized alpha olefin containing from 3 to 8 carbon atoms :

Which comprises continuously contacting, in a fluidized bed reaction zone, at a temperature of from 10°C up to 80°C and a pressure no greater than 7000 kPa, a gaseous mixture containing (a) ethylene and at least one higher alpha olefin containing from 3 to 8 carbon atoms, in a molar ratio of such higher alpha olefin to ethylene of from 0.35 : 1 to 8.0 : 1, and (b) at least 25 mol percent of at least a known diluent gas, with particles of a catalyst system comprising a precursor composition having the formula.



Wherein R is an aliphatic or aromatic hydrocarbon radical containing from 1 to 14 carbon atoms, or COR' wherein R' is an aliphatic or aromatic hydrocarbon radical containing from 1 to 14 carbon atoms.

X is selected from the group consisting of Cl, Br, I, and mixtures thereof.

ED is an organic electron donor compound selected from the group consisting of alkyl esters of aliphatic and aromatic acids, aliphatic ethers, cyclic ethers and aliphatic ketones.

m is 0.5 to 56.

n is 0, 1 or 2.

p is 2 to 116, and

q is 2 to 85.

said precursor composition being diluted with a known inert carrier material and completely activated with an organoaluminum compound having the formula :



where in X' is Cl or OR''

R'' and R''' are saturated hydrocarbon radicals containing from 1.0, to 14 carbon atoms.

e is 0 to 1.5

f is 0 or 1, and

d + e + f = 3,

said activator compound being employed in an amount such as to provide a total aluminum : titanium molar ratio in said reaction zone from 10 : 1 to 400 : 1.

Compl. specification 39 pages.

Compl. Drg. 1 sheet

CLASS : 32 F 2 d.

160138

Int. Class : C07d-51/46, 27/56

# "PROCESS FOR THE SYNTHESIS OF 4-OXO-2 SUBSTITUTED PYRIMIDO (2', 1'; 6,1) PYRIDO-(3,4-b)-INDOLES.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-110001, India, an Indian registered body incorporated under the Registration of Societies Act (Act XXI of 1860).

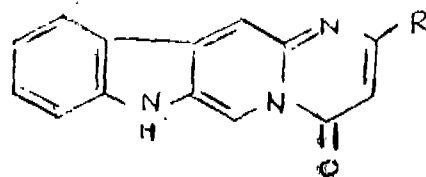
Inventors : SHIV KUMAR AGARWAL, ANIL KUMAR SAXENA BRIJESH MALAVIYA, HARISH CHANDRA & NITYA ANAND.

Application for Patent No. 338/DEL/1980 filed on 8th May 1980 Complete specification left on 7th August 1981.

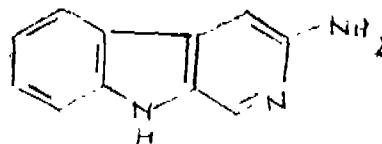
Appropriate office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-5.

## 5 Claims

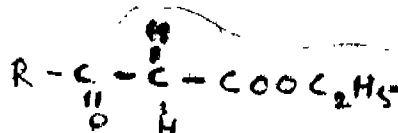
A process for the synthesis of 4-OXO-2-substituted pyrimido-(2', 1' : 6, 1)-pyrido-(3, 4-b)-indoles of general formula I



comprising reacting 3-amino-9-H-pyrido (3, 4-b)-indole of formula II



With the compounds of formula of III



in organic solvents and the reaction product formed is separated on treatment of the reaction mixture with a base and filtration, wherein R is alkyl such as herein described.

Prop. specn. 5 pages

Drg. 1 sheet

Comp. specn. 6 pages

Drg. 1 sheet

CLASS : 32 F<sub>1</sub> & 2<sup>(b)</sup>

160139

Int. Cl. : C07o 129/12.

# PROCESS FOR THE PRODUCTION OF GUANIDINE DERIVATIVES.

Applicant : IMPERIAL CHEMICAL INDUSTRIES PLC, of Imperial Chemical House, Millbank, London SW1P 3JF, England, a British company and ICI AMERICAS INC., of

Concord Pike and New Murphy Road, Wilmington, Delaware 19897, United States of America, a corporation organized under the laws of the State of Delaware, United States of America.

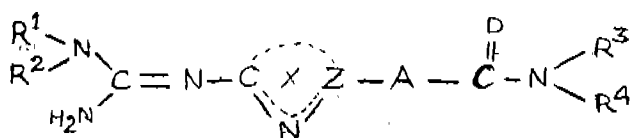
Inventor : TOBAIS OREGON YELLIN & DAVID JOHN GILMAN.

Application for P. No. 193/DEL/1982 filed on 8th March, 1982, Convention date on 9th March, 1981/8107273 & 17th September, 1981/8128179/(U. K.).

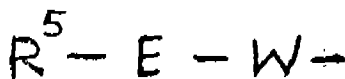
Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

### 3 Claims

A process for the manufacturer of a compound of the formula I.

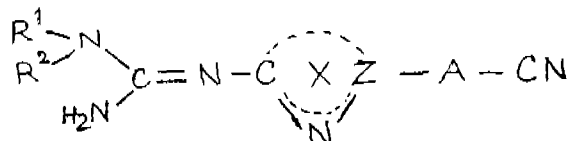


of the drawings and the pharmaceutically-acceptable acid-addition salts thereof in which  $R^1$  and  $R^2$ , which may be the same or different, are hydrogen atoms or branched or unbranched 1-10C alkyl, 3-8C cycloalkyl or 4-14C cycloalkylalkyl radicals, each alkyl, cycloalkyl or cycloalkylalkyl radical being optionally substituted by one or more halogen atoms selected from fluorine, chlorine and bromine atoms, provided that at least one of  $R^1$  and  $R^2$  is a halogen-substituted alkyl, cycloalkyl or cycloalkylalkyl radical and provided there is no halogen substituent on the carbon atom of the alkyl, cycloalkyl or cycloalkylalkyl radical which is directly attached to the nitrogen atom, or  $-R^2$  is a hydrogen atom and  $-R^1$  is a radical of the formula II.



as shown in the drawings in which W is an unbranched 2-6C alkylene chain which is optionally substituted by one or two 1-4C alkyl radicals, E is an oxygen or sulphur atom, a sulphinyl or sulphonyl radical, or a radical of the formula  $NR^6$  in which  $R^6$  is a hydrogen atom or a 1-6C alkyl radical,  $R^5$  is a hydrogen atom or an unbranched 1-6C alkyl radical which is optionally substituted by one or two 1-4C alkyl radicals, or  $R^5$  and  $R^6$  are joined to form, together with the nitrogen atom to which they are attached, a pyrrolidine, piperidine, morpholine, piperazine or N-methylpiperazine ring; in ring X the dotted line is a double bond on one side of the nitrogen atom and Z is a carbon or nitrogen atom such that ring X is a 5- or 6- membered aromatic heterocyclic ring which contains at least one nitrogen atom and may optionally contain one or two additional hereto atoms selected from oxygen, nitrogen and sulphur atoms, which heterocyclic ring may, where possible, carry one or two optional substituents, the optional substituents on ring X being selected from fluorine, chlorine and bromine atoms and 1-6C alkyl, 1-6C alkoxy, trifluoromethyl, hydroxy and amino radicals; A is a phenylene or 5-7C cycloalkylene radical or a 1-8C alkylene chain which is optionally substituted by one or two 1-3C alkyl radicals and into which is optionally inserted as part of the backbone of the chain, one or two groups selected from oxygen and sulphur atoms and NH. 1-6C N-alkyl, cis and trans vinylene, ethynylene, phenylene and 5-7C cycloalkylene radicals, provided that the shortest link between ring X and C = D is of at least 3 atoms, provided that when an optional insertion is made in chain A which results in the inserted group being directly attached to C = D the

inserted group is other than an oxygen or sulphur atom or an NH or N-alkyl radical, and provided that no two insertions selected from oxygen and sulphur atoms and NH and N-alkyl radicals are directly attached one to the other; D is an oxygen atom;  $R^6$  is a hydrogen atom;  $R^6$  is a hydrogen atom characterised by hydrolysis in a manner such as herein described or a compound of the formula V



of the drawings wherein  $R^1$ ,  $R^2$ , X, Z and A are as defined above followed by basification in a manner such as herein described to produce a compound of general formula I and if desired, treating the compound of the formula I with an acid to produce a pharmaceutically-acceptable acid addition salt.

Compl. Specn. 53 pages.

Drgs. 4 sheets.

CLASS : 159E.

160140

Int. Cl. : B61 19/00 & G06f 15/00.

"A CONTROL SIGNAL INTERLOCKING SYSTEM".

Applicant : WESTINGHOUSE BRAKE & SIGNAL COMPANY LIMITED, a British company of Foundry Lane, Chippenham, Wiltshire, SN15 1RT, England.

Inventor : CHRISTOPHER ROBERT BROWN, JOHN DOUGLAS CORRIE AND WILLIAM GEOFFREY JOHN WILSON.

Application for Patent No. 723/Del/1982 filed on 24th September, 1982.

Convention date on 10th October, 1981/8130644/(Great Britain).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

### 2 Claims

A control signal interlocking system comprising a parallel input data highway connected to a signal splitter circuit having three outputs each connected to a respective one of three parallel redundant sub-system through respective input serialising circuits, each of said sub-systems contains a similar computer operated by similar control programs to execute the same signal interlocking function; a system outputs; an output safety proving processor forming the sub-system output gating for each sub-system and connected to each computer, said sub-systems being mutually interconnected by the connection of said processors in a ring configuration through common circuit means also connected to said system output so that each receives the output of its respective sub-system computer and receives an output from a computer to its left and from another computer to its right, said processors each including a first temporary memory to store said outputs, a difference calculator connected for access to said temporary memory to determine differences between the outputs of all the computers two-at-a-time and store them in a second temporary memory, said calculator being connected to a read-only-memory which contains a reference table of all possible difference results and the corresponding computer output subtraction equations, for comparing the calculated differences with the reference table and reading out and comparing the corresponding subtraction equations, to produce an output which is fed to the first sub-system computer to connect it to the system output and, if said sub-system computer is found in error, to alternatively connect the second sub-system computer to the system output.

Compl. Specn. 17 pages.

Drgs. 3 sheets.

CLASS : 32D, F<sub>1</sub> & g (d).

160141

Int. Cl. : CO7f 1/00, 3/00.

"A PROCESS FOR THE PREPARATION OF ALKALI/ALKALINE EARTH METAL OF SUBSTITUTED  $\mathcal{L}$ -(3-PENTADECYLPHENOXY) ISOBUTYRIC ACID".

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-110 001, India, an Indian registered body incorporated under the Registration of Societies Act (Act XXI of 1860).

Inventors : THALLAPALLI RAMALINGAM, YADAVALLI VEKATA DURGA NAGESWAR, MADDAMSETTY VENKATESWARA RAO, PRALHAD BALVANT-RAO SATTUR AND GOPALAKRISHNA THYAGARAJAN.

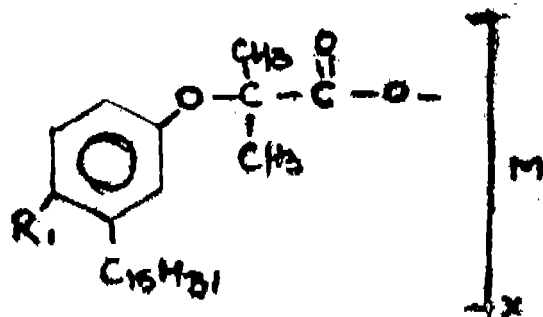
Application for Patent No. 292/Del/83 filed on 9th May, 1983.

Complete Specification left on 4th August, 1984.

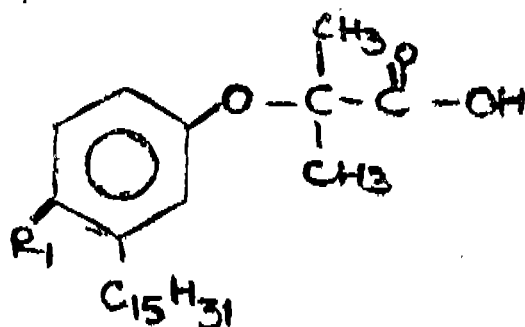
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 7 Claims

A process for preparation of alkali/alkaline earth metal salts of substituted  $\mathcal{L}$ -(3-pentadecylphenoxy)-isobutyric acid represented by the general structure shown in figure 1



the provisional specification wherein R<sub>1</sub> represents hydrogen or halogen such as sodium, chlorine, M denotes an alkali/alkaline earth metal such as sodium, magnesium or calcium and X represents 1 or 2 depending upon the nature of alkali metal employed, comprising reaction of a suitably substituted  $\mathcal{L}$ -(3-pentadecylphenoxy) isobutyric acid represented by the general structure shown in Fig. 2



Wherein R<sub>1</sub> has the meaning given above with alkali/alkaline earth metal salt in aqueous alcoholic medium followed by separation and drying of the product by known methods

Provisional Specn. 5 pages.

Compl. Specn. 12 pages.

Drgs. 2 sheets.

CLASS : 47 B.

160142

Int. Cl. : Colb 2/00, C10j 3/16.

"PROCESS AND APPARATUS FOR THE PRODUCTION OF SYNTHESIS GAS".

Applicant : RUHRCHEMIE AKTIENGESELLSCHAFT, of Bruchstrasse 219, Oberhausen 13, Federal Republic of Germany, a company incorporated under the laws of the Federal Republic of Germany.

Inventors : WINFRIED MATERNE, BERNARD SCHLEPER, ULRICH GERHARDUS, JOSEF HIBBEL, BERNHARD LIEDER, HEINRICH SCHEVE AND VOLKMAR SCHMIDT.

Application for Patent No. 301/Del/1983 filed on 10th May, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 14 Claims

A process of producing synthesis gas (Carbon monoxide and hydrogen), comprising :

introducing into a reaction zone a first, inner gas stream, a second, middle stream surrounding the first gas stream and comprising a suspension of carbon-containing particles in water and a third, outer gas stream surrounding the second stream and comprising oxygen : and

effecting partial oxidation of the carbon-containing particles in the reaction zone at a pressure range from 10 to 200 bar and at a temperature 1000 to 1600°C.

Compl. Specn. 17 pages.

Drgs. 2 sheets.

CLASS : 107 F &amp; G.

160143

Int. Cl. : F 02 m—63/00.

"A DIESEL ENGINE INCORPORATING A HEATING DEVICE FOR USE IN A FUEL INTAKE SYSTEM OF SAID DIESEL ENGINE."

Applicant(s) : PUNJAB TRACTORS LIMITED, OF PHASE IV, SAHIBZADA AJIT SINGH NAGAR, DISTT. ROPAR-160 051, INDIA, AN INDIAN COMPANY.

Inventor(s) : CHANDRA MOHAN.

Application for Patent No. 356/DEL/1983 filed on 30. May, 1983.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110005.

## 3 Claims

A diesel engine incorporating a heating device for use in the fuel intake system of said diesel engine to prevent a clogging of the filter elements by wax entrained in the fuel, said device comprising a first pipe connected between the fuel tank of the engine and the pump of the fuel intake system, a second pipe connected between the pump and the fuel filters, said engine having an exhaust manifold characterized in heating means with the said exhaust manifold for heating said first and/or second pipe so that the fuel flowing through said first or second pipe is heated, said heating means consisting of a heat sink, said first and/or second pipe being in surface contact with one side of said heat sink, the opposite side of said heat sink being in surface contact with said exhaust manifold.

Compl. Specn. 14 pages.

Drg. 2 sheets.



CLASS : 14 B.

160144

Int. Cl. : H 01 m 11/00, B 01 k 3/12.

"AN IMPROVED NONAQUEOUS CELL".

Applicants : UNION CARBIDE CORPORATION, MANUFACTURERS, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, WITH OFFICES AT OLD RIDGEBURY ROAD, DANBURY, STATE OF CONNECTICUT, 06817, UNITED STATES OF AMERICA.

Inventor : STEPHEN GORDON DAVIS.

Application for Patent No. 399/DEL/83 filed on 13th June, 1983.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110005.

## 5 Claims

An improved nonaqueous cell comprising a lithium anode, a liquid organic electrolyte of the kind such as herein described and an active cathode selected from the group consisting of an iron sulfur-containing cathode and/or a  $MnO_2$ -containing cathode; wherein at least one lithium halide is added to the cell.

Compl. Specn. 15 pages.

CLASS : 80 E.

160145

Int. Cl. : B 01 d 41/00.

"PROCESS AND APPARATUS FOR THE REGENERATIVE PURIFICATION OF A GRANULAR FILTER BED".

Applicant : GIMAG AKTIENGESellschaft. OF MARTINSPLATZ 8, CH-7002 CHUR, SWITZERLAND, A SWISS COMPANY.

Inventor : WOLFGANG BERZ.

Application for Patent No. 400/DEL/83 filed on 14th June, 1983.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110005.

## 12 Claims

Process for the regenerative purification of a filter medium which, in one or more regeneration phases, drops down in granular form between gas-permeable elements and is subsequently conveyed up again through a conveying pipe, characterised in that either a proportion of the pure gas or a proportion of the flushing gas used to remove dust from the filter medium is employed to convey the granules through the conveying pipe, the granules being sucked away at the upper orifice of the conveying pipe and being entrained into the conveying pipe, at the lower orifice thereof by the said portion of the pure gas of flushing gas.

Apparatus for the regenerative purification of a granular filter bed, having a filter bed which is located on a periphery of a pure gas space and contains granules serving as the filter medium, which granules are, at least during a regeneration phase, conveyed upward in a conveying pipe and fall down in the zone of the filter bed, the filter bed, in its lower zone adjacent to the conveying pipe inlet orifice (5a), not being bounded in the direction of this orifice (5a), characterised in that means (32) are provided which produce an upwardly-directed suction within the conveying pipe (5), and that means (6, 49) are also provided which, in the zone of the conveying pipe inlet orifice (5a), cause a change in direction of the gas contained in the pure gas space (Rc1), when it passes into the conveying pipe (5), so that the granular filter medium which flows from the filter bed (F) against the conveying pipe inlet orifice (5a) is entrained by the gas stream whose direction has been changed and is conveyed upward through the conveying pipe (5).

Compl. Specn. 17 pages.

Drg. 3 Sheets.

4—127 GI/87

CLASS : 72 A.

160146

Int. Cl. : C 06 b—1/00.

"EMULSION EXPLOSIVE COMPOSITION AND A PROCESS FOR PRODUCING THE SAME".

Applicant(s) : IMPERIAL CHEMICAL INDUSTRIES PLC., OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SW1P 3JF, ENGLAND, A BRITISH COMPANY.

Inventor(s) : JOHN COOPER.

Application for Patent No. 475/DEL/1983 filed on 13 JUL., 1983.

Convention Application No. 3221038 filed on 21-07-1982 (U.K.).

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110005.

## 10 Claims

An emulsion explosive composition comprising a discontinuous phase containing an oxygen-supplying salt component such as herein described and an organic medium such as herein described forming a continuous phase characterised in that the discontinuous phase additionally comprises an inhibitor such as herein described capable of at least partially restricting growth and or modifying the habit of crystals of the oxygen-supplying salt component.

Compl. Specn. 20 pages.

CLASS : 88 D

160147

Int. Cl. : F 23 g—1/00 &amp; F 23 k—5/10.

ABIOGAS DIGESTER SYSTEM.

Applicant : KAPCOMPANY GENERAL LIMITED, C/O KAPUR SOLAR FARMS, BIJWASAN NAJAFGARH ROAD, P.O. KAPAS HERA, NEW DELHI-110 037, INDIA, AN INDIAN COMPANY.

Inventor : JAGDISH CHANDRA KAPUR.

Application for Patent No. 502/Del/1983 filed on 23 July 1983.

Complete Specification left on 31 Jul 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110005.

## 8 Claims

A biogas plant comprising one or more biogas digesters characterised in that a heat exchanger is provided within each biogas generator, for heating the slurry in the biogas digester, a hot water storage tank for feeding hot water to the said heat exchanger, a pump for circulating the hot water through the heat exchanger, one or more means utilising non-conventional sources of energy for heating water supplied to the hot water storage tank and one or more means for producing electricity utilising one or more of the said sources of energy for operating the control devices of the plant and if necessary for heating the water fed to the hot water storage tank.

Provisional specifications 4 pages.

Compl. specn. 10 pages.

Drg. 1 sheet

CLASS : 32 F

160148

Int. Cl. : C 08 g—17/00.

A PROCESS FOR THE PREPARATION OF UNSATURATED POLYESTER RESINS.

Applicant : SHRI RAM INSTITUTE FOR INDUSTRIAL RESEARCH, 19, UNIVERSITY ROAD, DELHI-110007, INDIA, AN INDIAN INSTITUTE.

**Inventors :** DATTAPRASAD ACHYOT DABHOLKAR, GEETA UNNIKRISHNAN, PARKASH, VERSHA SACHDEVA, MAHESH KUMAR BAHL, RAJENDER KUMAR DIWAN, AMARJIT SINGH AND RAKESH CHANDER SOOD.

Application for Patent No. 612/Del/1983 filed on 6th September, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

A process for the preparation of unsaturated polyester resin which comprises in preparing a mixture of maleic anhydride, phthalic anhydride, propylene glycol characterized in adding 0.2% by weight of triphenyl phosphite to said mixture, heating said mixture in the presence of carbon dioxide to a temperature of upto 185°C till the required acid value of 40 to 50 is achieved.

Complete specifications 6 pages.

CLASS : 9 A, 70 B

160149

Int. Cl. : C22 c 21/00.

**PROCESS FOR THE PREPARATION OF ALUMINIUM BASE GALVANIC ALLOY ANODE.**

**Applicants :** COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAFT MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

**Inventor :** ARABINDA NATH MUKHERJI, KRISHNA PRASAD MUKHERJEE AND VISWANATH ANANT ALTEKAR.

Application for Patent No. 683/Del/83 filed on 1st October, 1983.

Appropriate office for opposition proceeding (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

A process for the preparation of aluminium based alloy anode for cathodically protecting steel structures from sea water corrosion which comprises adding zinc-indium master alloy to super heated molten aluminium and adding the other alloying elements zinc and cadmium to the molten mixture and casting the alloy to the desired shape of the anode.

Provisional specification 7 pages.

Complete specification 7 pages.

CLASS : 32B

160150

Int. Cl. : C07 b 3/00.

**DEHYDROGENATION OF DEHYDROGENATABLE HYDROCARBONS.**

**Applicant :** UOP INC., A CORPORATION ORGANIZED IN THE STATE OF DELAWARE, WITH ITS PRINCIPAL PLACE OF BUSINESS AT TEN UOP PLAZA, ALOQUIN & MT. PROSPECT ROADS, DES PLAINES, ILLINOIS, U.S.A.

**Inventor :** TAMOTSU IMAI.

Application for Patent No. 836/Del/83 filed on 13th December, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 17 Claims

A process for the dehydrogenation of a dehydrogenatable hydrocarbon which comprises contacting said hydrocarbon with a dehydrogenated catalyst comprising an alkaline metal-promoted iron compound at dehydrogenation conditions in the presence of steam in a first dehydrogenation zone, and thereafter contacting the resultant mixture of uncovered

hydrocarbons, dehydrogenated hydrocarbons, hydrogen and steam with an oxygen-containing gas in the presence of an oxidation catalyst comprising a noble metal of Group VIII and a metal of Group IVA of the Periodic Table composited on a highly porous inorganic support at oxidation conditions in an oxidation zone and selectively oxidizing hydrogen contained in said mixture to reheat said mixture to dehydrogenation temperature by internal catalytic combustion of the hydrogen, contacting the thus reheated mixture with additional dehydrogenation catalyst comprising an alkaline metal-promoted iron compound at dehydrogenation conditions in a first dehydrogenation zone, and recovering the dehydrogenated hydrocarbon.

Complete specification 25 pages.

CLASS : 67 C

160151

Int. Cl. : B01 j 17/00.

**ELECTRONIC MATRIX ARRAYS AND METHOD FOR MAKING PARALLEL PREPROGRAMMING OR FIELD PROGRAMMING THE SAME.**

**Applicant :** ENERGY CONVERSION DEVICES, INC., OF 1675 WEST MAPLE ROAD, TROY, MICHIGAN-48084, UNITED STATES OF AMERICA.

**Inventor :** ROBERT ROYCE JOHNSON.

Application No. 9/Cal/84 filed January 5, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 22 Claims

A method of making an electronic matrix array comprising the steps of :

forming at least one layer of phase changeable material on a conductive substrate, said phase changeable material having a substantially nonconductive state and a comparatively high conductive state, said layer being formed in one of said states;

parallel programming said layer by irradiating selected areas of said layer to simultaneously convert said selected areas of said layer to the other one of said states to form selected substantially nonconductive portions of said layer and selected comparatively high conductive portions of said layer; forming first and second sets of electrically conductive address lines on respective opposite sides of said layer, said address lines of said first and second sets being formed for crossing at an angle to form a plurality of crossover points; and

said selected substantially nonconductive layer portions and said selected comparatively high conductive layer portions being formed between said first and second sets of address lines.

Compl. specn. 56 pages.

Drg. 7 sheets

CLASS : 129 J

160152

Int. Cl. : B21b 1/22, 1/42, 13/18, B23p 3/06, C23c 5/00.

**METHOD OF MANUFACTURING OF HOT CLADDED METAL STRIP THROUGH ROLLING UNDER HIGH PRESSURE.**

**Applicant :** FRIED. KRUPP GESELLSCHAFT MIT BESCHRANKTER HAFTUNG, OF ALTENDORFER STR. 103, D-4300 ESSEN 1, WEST GERMANY.

**Inventor :** PETER FINK.

Application No. 56/Cal/84 filed January 27, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

A process for manufacturing of hot clad metal strip through rolling under high pressure, characteristic by, that the cladding in one planetary rolling mill with one multi-rolling frame by a thickness reduction of 90 to 98% and one preworking feed rolling frame by a thickness reduction of 25 to 35% and a rolling velocity of 0.8 to 3.6 m/min is achieved and that before the rolling and the preceded heating, base material of the cladding material is prepared on the contact surfaces to a metallic finish, put one above the other, and connected to each other on the edges by point or seam welding.

Complete specn. 12 pages.

Drg. 7 sheets

CLASS : 175 H

160153

Int. Cl. F 02 f 3/00.

## MULTI-PART, LIQUID-COOLED PISTON FOR INTERNAL COMBUSTION ENGINES.

Applicant : MAHLE GmbH, of D-7000 Stuttgart 50, Postfach 50 07 69, 50 07 80, Pragstrasse 26-46, Federal Republic of Germany.

Inventor : Kurt Jungling.

Application No. 59/Cal/84 filed January 28, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

## 2 Claims

A multi-part, liquid-cooled piston having an upper piston part (1) forming the crown and at least a part of the ring groove region and a lower piston part (2) as piston skirt, where the ring groove region lying in the upper part adjoins the piston crown in annular skirt form especially with the first ring groove (5) and in which the upper part (1) and lower part (2), between which there is arranged an intermediate piece (3) abutting radially and axially upon them and covering at least the region behind the first piston ring groove (5), are connected with one another by at least substantially axially extending necked-down (waisted) screws (4), characterised in that the coefficient of expansion of the material of the intermediate piece (3) is greater than that of the material of the upper part (1).

Comp. Sp123465 12345 12345 1234 512354 123 412345

Comp. Specn 6 pages.

Drg. 1 sheet.

CLASS : 145E 1 &amp; 2.

160154

Int. Cl. : D21c 9/00.

## CONTINUOUS COUNTERFLOW WOOD PULP FIBER STOCK WASHING ARRANGEMENT AND METHOD OF CONTINUOUS COUNTER FLOW WASHING WOOD PULP FIBERS.

Applicant : BELOTT CORPORATION, of P.O. Box 350, Beloit, Wisconsin 53511, U.S.A.

Inventor : EDGAR J. JUSTUS.

Application No. 77/Cal/84 filed February 2, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

## 7 Claims

A continuous counterflow wood pulp fiber stock washer arrangement, characterized in comprising :

a traveling forminous wire (10) for collecting fibers on the surface with the passage of water through the wires to wash the fibers;

a plurality of liquid containing stock chambers (12, 13, 14, 15, 16, 17) above the wire arranged sequentially in the direction of wire travel for containing stock and immersing the wire in stock above the wire, with a first chamber (12)

at the upstream end of the wire relative to its direction of travel and sequential chambers (13, 14, 15, 16, 17) positioned after said first chamber (12);

stock delivery means (conduits) (9) for delivering stock to said first chamber 12;

a forminous plate means (18, 19, 20, 21, 22, 23) beneath the wire (10);

pump means (40, 41, 42, 43, 44) for each of the sequential chambers (13, 14, 15, 16, 17) drawing water through the wire (10) beneath the respective plate (19, 20, 21, 22, 23) and delivering water to the next sequential chamber upstream;

fresh water supply (54) for delivering water to the last of the chambers (17);

means (50) for removing washed pulp fibers from the wire surface following chambers;

and discharge means (52) for drawing off water from said first chamber (12);

and wherein said chambers (12, 13, 14, 15, 16, 17) are in communication and are separated by baffles (30, 31, 32, 33, 34).

Compl. specn. 11 pages.

Drg. 1 sheet

CLASS : 154 D &amp; H.

160155

Int. Cl. : D 06 p 7/00.

## PRINTING PLATE CARRIER FOR A ROTARY PRINTING MACHINE.

Applicant : VEB KOMBINAT POLYGRAPH "WERNER LAMBERZ" LEIPZIG, of 7050 LEIPZIG, ZWELNAUNAUNDORFER STR. 59 GERMAN DEMOCRATIC REPUBLIC.

Inventors : 1. HORST EICHHORN, 2. ERWIN DIMMEL, 3. HARALD FEUSTEL, 4. ERNST FREITAG.

Application No. 248/Cal/84 filed April 18, 1984.

Convention date 2nd February, 1984 (8402799) U.K.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

## 10 Claims

A printing plate carrier for a rotary printing machine, the carrier comprising a cylinder provided with an axially extending recess which opens at the cylinder circumference to permit reception of bent front and rear and portions of at least one flexible printing plate of a given thickness and which is so inclined that the opening of the recess leads the base thereof in an intended direction of rotation of the cylinder, a plurality of positioning pins mounted in the cylinder to extend through the recess and through slots in the plate and portions when received in the recess, and a locating strip arranged in the recess and provided with bores receiving the pins with play, the strip having a width less than that of the recess by an amount equal to more than twice said plate thickness and being tiltable on the pins to in use pressurably bear, at the side thereof trailing in said direction of rotation, against the adjacent one of such plate end portions.

Comp. Specn, 11 pages.

Drg. 2 sheets.

CLASS : 107-J.

160156

Int. Cl. : C1 F 02 d 15/00.

## COMPRESSION RELEASE ENGINE RETARDER FOR MULTI-CYLINDER INTERNAL COMBUSTION ENGINES.

Applicant : THE JACOBS MANUFACTURING COMPANY, AT 22 EAST DUDLEYTOWN ROAD, GLOOMFIELD, CONNECTICUT 06002, UNITED STATES OF AMERICA.

Inventor : RAYMOND NOEL QUENNEVILLE.

Application No. 251/Cal/84 filed April 18, 1984.

Convention dated 17th November, 1983 (441,342) Canada.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

#### 12 Claims

A compression release engine retarder for use in a multi-cylinder four cycle internal combustion engine having a crankshaft, intake and exhaust manifolds, at least one exhaust valve for each cylinder, and at least one slave piston for opening, during a retarding operation, the exhaust valve with which it is associated, characterized by a rotary hydraulic pulse generator positively driven in synchronism with said engine crankshaft for sequentially supplying pulses of hydraulic fluid under pressure to predetermined slave pistons by means of ducts interconnecting said slave pistons and said hydraulic pulse generator, and a common valve control arranged in relation to said ducts to establish, when the valve control is inoperative, low pressure fluid conditions in said ducts which occur during a fueling mode, and to establish when the valve control is operated during retarding, high pressure fluid conditions in said ducts.

Comp. Specn. 28 pages.

Drg. 8 sheets.

CLASS : 17 D.

160157

Int. Cl. : C 12 b 1/00.

#### IMPROVEMENTS IN BIOMASS SUPPORT MEDIUM.

Applicant : SOCIÉTÉ ANONYME D'ÉTUDES, DE RECHERCHES ET DE PRODUCTIONS D'AGENTS CHIMIQUES-E.R.P.A.C., OF 9, RUE AUGUSTE BARBIER, 75011 PARIS, FRANCE.

Application No. 271/Cal/84 filed April 25, 1984.

Inventor : FEROGES TREYSSAC.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

#### 8 Claims

A biomass support medium intended to be the seat of biological fermentations in particular in treatments for purifying waste effluents, characterised in that it comprises an adsorbing substance, e.g. one formed by active charcoal and/or a substance having properties similar to those of active charcoal, mixed in the form of small sized particles with a granular surface, with a binder comprising a material having good mechanical strength and high chemical inertia with respect to said adsorbing substance, such as a plastic material, the effluents to be treated and the biomass intended to be fixed on the support medium, a part at least of said particles emerging at the surface of said support medium.

Compl. Specn. 13 pages.

Drg. sheet nil

CLASS : 47 C.

160158

Int. Cl. : C 10 b 49/02, 49/14, 55/00, 57/02.

#### COAL LIQUEFACTION PROCESS INTEGRATED WITH A COKE PRODUCTION STEP.

Applicant : MITSUI SRC DEVELOPMENT CO. LTD. OF NO. 1-1, MUROMACHI 2-CHOME, NIHONBASHI, CHUO-KU, TOKYO, JAPAN.

Application No. 286/Cal/84 filed April 30, 1984.

Inventors : 1. KIYOTAKA HIRAYAMA, 2. SHOICHI OI, 3. SADA O WASAKE, 4. SHIGEMI NAGAYOSHI, 5. HIDEHIKO SUGIMURA.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

#### 5 Claims

A coal liquefaction process using a solvent and integrated with a coke production step for producing coke from coal, which comprises using the crude tar obtained from the coke production step as a coal liquefaction solvent in the coal liquefaction step, using in the coal liquefaction step a hydrogenrich gas obtained by purifying a gaseous mixture of the coke oven gas from the coke production step and the waste gas from the coal liquefaction step, and using all or a part of the solvent-refined coal obtained from the coal liquefaction step by mixing it with the feed coal for the coke production step.

Comp. Specn. 21 pages.

Drg. 2 sheets.

CLASS : 172 C<sub>4</sub> & 9 D<sub>a</sub>

160159

Int. Cl. : D 01 g 15/46.

#### APPARATUS FOR DRAWING OFF FIBRE WEBS OR SLIVERS FROM SUPPLY ROLLERS AND STORING OR LAYING THE SAME IN CANS.

Applicant : TRUTZSCHLER GmbH & CO. KG., of Duvenstrasse 82-92, D-4050 Monchengladbach 3, Federal Republic of Germany.

Inventor : PETER JAGST.

Application No. 288/Cal/84 filed April 30, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

#### 13 Claims

An apparatus for drawing off webs or slivers of fibres from a supply roller and storing the same in a can comprising a rotating head mounted on a frame, a fibre web or sliver supplying roller or drum arranged within the rotating head and means for rotating the said drum or roller including a rotating driving element which rolls along a surface independent of the rotating head.

Complete Specn. 12 pages.

Drgs. 3 sheets.

CLASS : 206 E

160160

Int. Cl. : H03j 5/00.

#### TUNER FOR AT LEAST TWO FREQUENCY RANGES.

Applicant TELEFUNKEN ELECTRONIC GMBH, of Theresienstr. 2, D-7100 Heilbronn, Federal Republic of Germany.

Inventor : 1. FRANZ HEIGL, 2. JOSEF REHM.

Application No. 355/Cal/84 filed May 24, 1984.

Appropriate office for opposition proceeding (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

#### 15 Claims

Tuner for at least two frequency ranges, more particularly, combination tuner for UHF and VHF ranges, comprising self-oscillative mixer for the high frequency range and an externally controlled mixer for the low frequency range which is supplied with oscillator energy from a separate oscillator, characterized in that during operation in the low frequency range, the self-oscillating mixer is switched over to oscillator for the low frequency range.

Complete specfn. 14 pages.

Drg. 1 sheet.

Class : 187 H and 206 BE.

160161

Int. Class : G 06 f—15/00 and H 04 f—3/00.

#### "SYSTEM FOR EXCHANGING ENCODED MESSAGES BETWEEN STATIONS".

Applicant : COMPAGNIE INDUSTRIELLE DES TELECOMMUNICATIONS CIT—ALCATEL, a French body corporate, of 12, rue de la baume, 75008 Paris, France.

Inventor : ANDRE PELOTTE.

Application for Patent No. 110/DEL/1984 filed on 06 Feb 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

### 5 Claims

A system for exchanging encoded messages between stations connected by a signalling link and a data link, wherein each station is connected to a general clock and includes a control unit, a connection module responsive to said control unit and connected to the signalling and data links, and an address bus and data bus connecting the control unit to the connection module, wherein the signalling and data links are serial multiplex links synchronous with the clock a time slot in a signalling frame is assigned to each station, and the message to be transmitted are of different lengths and are contained within an integer number of frames, and wherein each connection module comprises :

first means at each connection module for generating a status signal corresponding to its own status to be sent during its respective time slot;

a signalling sender circuit responsive to said first means for sending said status signal onto said signalling links;

a signalling receiver circuit at each connection module connected to said signalling links for receiving said status signals from other stations;

a station status memory at each connection module for storing the status signals of each of said stations received from said signalling receiver circuit;

a message send memory for storing a message to be sent when a station is operating as a calling station said message to be sent containing a plurality of frames of information;

counter means, decremented in response to the transmission of each frame of said message to be sent, for indicating the number of frames of said message remaining to be sent, when a station is operating as a calling station;

second means responsive to said counting means for producing a signal when the number of frames of said message remaining to be sent is zero;

reservation signal generating means, responsive to outputs from said counting means and second means indicating a non-zero content in said counting means, for when a station is operating as a calling station, generating a reservation signal during the time slot of said calling station and having a duration equal to the plurality of frames of information;

third means, responsive to said reservation signal generating means, for sending a reservation bit signal over said signalling links in the respective time slot of said calling station, for reserving said signalling links for a duration of one frame, said reservation bit signal being sent at each frame excepted when said number of frames of information remaining to be sent is zero;

fourth means, connected to the control unit, for, when a station is operating as a calling station, producing a signal corresponding to the time slot of a called station;

fifth means for, when a station is operating as a calling station, sending a calling bit over the signalling link in the time slot of the called station;

sixth means for, when a station is operating as a called station, producing a signal corresponding to the time slot of the calling station;

first addressing means for addressing said message send memory for reading out the message to be sent when a station is operating as a calling station;

an output circuit connected to said data links for sending the message read out from said message send memory;

a message receiver circuit for receiving message information from said data links when a station is operating as a called station;

second addressing means;

a message receive memory responsive to said second addressing means for storing message information received by said message receiver circuit, when a station is operating as a called station;

seventh means for, when a station is operating as a calling station, producing at the end of each frame of said reservation signal a send timing pulse signal for decrementing said counting means and for activating said reservation signal generating means, first addressing means and message sender circuit, when the number of frames of said message remaining to be sent is non-zero; and

eighth means, responsive to said send timing pulse signal produced at the end of each frame of said reservation signal, for when said number of frames of said message remaining to be sent is zero, producing an end of sending timing pulse signal for activating said message sender circuit in the time slot of the calling station in order to send an odd parity bit after said message information.

Compl. Specn. 37 pages.

Drgs. 7 sheets.

Class : 19 A & 173 B.

160162

Int. Class : F 16 G—11/00. B 21 D—51/16.

METHOD OF PREPARING IMPROVED PARTING BOLT RINGS AND PARTING BOLT RINGS OBTAINED THEREBY.

Applicant : BHARAT HEAVY ELECTRICALS LIMITED, having its Registered Office at 18—20, Kasturba Gandhi Marg, New Delhi-110 001, India, Indian Body Corporate.

Inventors : NARASIMHAN RAMADASS DUMPALA MAHESWAR REDDY.

Application for Patent No. 234/Del/1984 filed on 13th March, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

### 5 Claims

A process for the preparation of improved parting bolt rings which comprises subjecting the surfaces of the said rings to the usual process of cleaning, followed by applying an intermediate coating of a layer of nickel aluminide or nickel chromium whereafter a coating of alumina is deposited on said intermediate coating.

(Complete Specification 05 Pages)

Class : 173 A & 129 Q.

160163

Int. Class : B 05 B—1/00.

IMPROVEMENT IN OR RELATING TO METALLIC WELDING NOZZLES.

Applicant : BHARAT HEAVY ELECTRICALS LIMITED, having its Registered Office at 18—20, Kasturba Gandhi Marg, New Delhi-110 001, India, an Indian Body Corporate.

Inventors : 1. NARASIMHAN RAMADASS 2. DUMRALA MAHESWAR REDDY.

Application for Patent No. 235/Del/1984 filed on 13th March, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110 005.

### 6 Claims

An improved metallic welding nozzle comprising a nozzle made of a metal or alloy characterised in that the tip of the nozzle has a coating of a ceramic material applied to its outer surface and in that at least one intermediate coating is provided between the said coating of ceramic material

and the outer surface of the tip of the nozzle, the intermediate coating containing progressively less ceramic material and progressively more of a metal or an alloy towards the outer surface of the nozzle, the said metal or alloy being compatible with the metal or alloy of which the nozzle is made.

Compl. Specn. 9 pages.

Drg. 1 sheet.

Class : 25 B.

160164

Int. Class : E 04 C—1/10.

A PROCESS FOR THE MANUFACTURES OF INSULATING BRICK FROM RICE HUSK ASH.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-110 001, India an Indian Registered body incorporated under the registration of societies Act (Act XXI of 1860).

Inventors : ASIS KUMAR ROY, ARABINDA DE.

Application for Patent No. 260/Del/1984 filed on 24th March, 1984.

Complete Specification left on the 11th February, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) patent Office Branch, New Delhi-110 005.

#### 6 Claims

A process for the manufacture of insulating brick from rice husk ash comprises adding hydrated alumina to refractory clay possessing plasticity, mixing it with rice husk ash and phosphoric acid with addition of water, forming the blend into a desired size and shape, drying and curing the product.

Provisional Specification 09 pages)

(Complete Specification 10 pages)

Class : 70 B

160165

Int. Class : G01n—27/30.

"A METHOD OF MANUFACTURING AN ELECTRODE FOR AN ELECTROCHEMICAL CELL, AND AN ELECTRODE MANUFACTURED BY THE METHOD".

Applicant : SAFT, a French Body Corporate, of 156, avenue de Metz, 93230 Romainville, France.

Inventor : John ATKIN, & Marie—Therese LOUSTAU.

Application for patent no. 262/Del/1984 filed on 26th March 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 10 Claims

1/A method of manufacturing an electrode for an electrochemical cell, said electrode comprising an active material such as herein defined and a conductive metal powder, such as herein defined the method comprising, the steps of :

preparing an intimate mixture of said powder and said active material in granular form, a metal current collector being integrated in said mixture, and

sintering said mixture by passing it through a variable magnetic field, said magnetic field being varied to produce trains of pulses, wherein the magnetic field oscillates at a frequency lying in the range 1 MHz to 10 MHz, wherein the duration of a single pulse train is above 0.05 seconds and wherein the intervals between pulse trains are at least as long as the durations of the pulse trains.

Compl. Specn. 8 pages.

Drg. 1 sheet.

Class : 84 C1.

160166

Int. Cl. : F23b 7/00.

"ENERGETIC FLUID PRODUCT".

Applicant : CREUSOT-LOIRE, a French company, of 42 rue d'Anjou 75008 Paris France.

Inventor : GERARD ANTONINI, OLIVIER FRANCOIS, ALAIN TOURET and ROBERT WANG.

Application for Patent No. 292/Del/84 filed on 2nd April 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) patent Office Branch, New Delhi-110 005.

#### 5 Claims

Energetic fluid product containing a finely divided solid combustible matter such as herein described suspended in at least one liquid phase such as herein described and capable of being circulated in a duct for feeding a treatment chamber, wherein the solid particles are constituted by a powdered coal and the proportion by weight of solid phase can reach approximately 85%, said solid particles being homogeneously dispersed within a stable foam produced by mixing gas phase such as herein described, with the liquid phase to which stabilizing and emulsifying products have been added, and the liquid phase consisting solely of fine films connecting the solid particles together and confining the gas bubbles which occupy the spaces between the solid particles.

Compl. Specn. 19 pages.

Drgs. 2 sheets.

CLASS : 81, 158 E<sub>1</sub>, & 24 F.

160167

Int. Cl. : B 60 r 23/00.

A DEVICE FOR AUTOMATIC APPLICATION OF BRAKES OF A RAILWAY TRAIN ON THE OCCURRENCE OF FIRE.

Applicant : JAGDISH PRAKASH MATHUR, AN INDIAN NATIONAL, OF 18, STANLEY ROAD, ALLAHABAD-211 002, UTTAR PRADESH, INDIA.

Inventors : JAGDISH PRAKASH MATHUR.

Application for Patent No. 299/Del/1984 filed on 5th April, 1984.

Complete Specification left on the 13th August, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) patent Office Branch, New Delhi-110 005.

#### 13 Claims

A device for automatic application of brakes of a railway train on the occurrence of a fire or an axle box getting inordinately hot comprising a pipe connected to vacuum pipe of vacuum brakes of the said railway train and projecting into the location to be protected against fire, a protective member closing the mouth of the pipe at least part of which protective member being made of a material meltable, deformable and/or destroyable by the heat of the fire and a socket securing the protective member in contact with the mouth of the pipe and a guard member provided around the mouth of the said pipe and the socket.

Provisional Specification 3 pages.

Compl. Specn. 10 pages.

Drg. 1 sheet.

CLASS : 32F 2b[IX(1)].

160168

Int. Cl. : C07 d-27/56.

PROCESS FOR THE SYNTHESIS OF SUBSTITUTED-S-TRIAZINO-(2',1 : 6,1)-PYRIDO-(3, 4b)-INDOLES".

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, OF RAFI MARG, NEW DELHI-110 001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

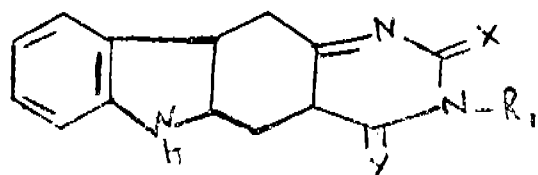
Inventors: SHIV KUMAR AGARWAL, ANI KUMAR SAXENA, BRAJESH MALAVIYA, HARISH CHANDRA, NITYA ANAND.

Application for Patent No. 500/Del/1981 filed on 7th August, 1981.

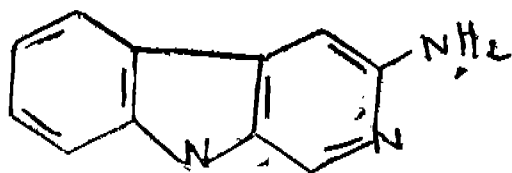
Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 6 Claims.

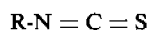
A process for the synthesis of substituted-S-triazino (2'1': 6,1)-pyrido-(3, 4-b)-indoles of formula I



wherein  $R_1$  is hydrogen, X is sulfur and Y is oxygen comprising reacting 3-amino-9H-pyrido (3, 4-b) indole of formula II



with a compound of the formula III



wherein R is  $COO-C_2H_5$  and subsequent cyclisation of the reaction product in the presence of a base and solvent.

Compl Specn. 5 pages.

Drgs. 1 sheet.

CLASS: 32F 2(b) [IX(1)].

160169.

Int. Cl.: C07-27/56.

PROCESS FOR THE SYNTHESIS OF SUBSTITUTED-S-TRIAZINO-(2'1': 6,1)-PYRIDO-(3, 4-b)-INDOLES.

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, OF RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

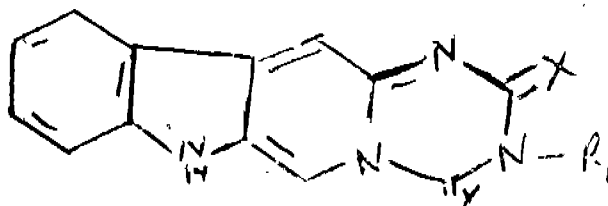
Inventors: SHIV KUMAR AGARWAL, ANIL KUMAR SAXENA, BRAJESH MALAVIYA, HARISH CHANDRA & NITYA ANAND.

Application for Patent No. 100/Del/85 filed on 7th February, 85. Divisional to application No. 500/Del/81 filed on 7th August, 81.

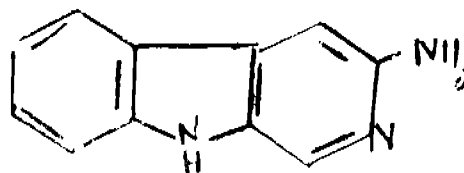
Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 5 Claims

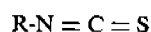
A process for the synthesis of substituted-S-triazino (2', 6,1)-pyrido (3,4-b) Indoles of formula I



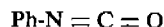
wherein  $R_1$  is aryl radical x is oxygen and y is sulfur, comprising reacting 3-amino-9H Pyrido (3, 4.b) Indole of formula II



with a compound of the formula III



wherein  $R_1$  is an aryl radical and subsequent cyclisation of the product formed in the presence of a compound of the formula IV.



wherein Ph represents phenyl.

Compl. Specn. 5 pages.

Drg. 1 sheet.

CLASS: 32F1.

160170.

Int. Cl.: C07c 65/02.

A PROCESS OR THE MANUFACTURE OF 2, 4 DICHLORO-5-PENTADECYL PHENOXYACETIC ACID.

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA. AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: NYSHADHAM AMARNATH, NANASAHEB DATTAJIRAO GHATGE & PRAMOD PRABHAKAR MOGHE.

Application for Patent No. 587/Del/84 filed on 21st July, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 6 Claims

A process for the preparation of 2,4 dichloro-5-pentadecyl phenoxy acetic acid which comprises reacting the sodium or potassium salt of 2,4. dichloro-tetrahydro-anacardiol with chloroacetic acid in the presence of quaternary ammonium salts as catalyst and a solvent.

Compl. Specn. 5 pages.

Drg. 1 sheet.

CLASS : 114A.

160171.

## METHOD FOR PROCESSING PELTS AND LEATHER

Applicant : ROHM GMBH, A BODY CORPORATE OF THE FEDERAL REPUBLIC OF GERMANY OF KIRSCHENALLEE, 6100 DARMSTADT 1, FEDERAL REPUBLIC OF GERMANY.

Inventors : ROLF MONSHEIMER, ERNST PFLEIDERER, WERNER SIOL, HANNS BOSSLER & HANS TRABITZSCH.

Application for Patent No. 563/Del/84 filed on 10th July, 1984.

Division to Application No. 215/Del/81 filed on 10th April, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

18 Claims

A method for processing pelts and/or leathers which comprises treating in any known manner, the pelts and/or leathers with an aqueous dispersion of a polymer based on monomeric units of esters of acrylic and/or methacrylic acid containing nitrogen groups, esters of acrylic and/or methacrylic acid not containing nitrogen groups and acrylic and/or methacrylic acid, said polymer containing from 5 up to 25% weight of esters of acrylic and/or methacrylic acid containing nitrogen groups, from 67 to 92% by weight of esters of acrylic and/or methacrylic acid not containing nitrogen groups and from 1 to 8% by weight of acrylic and/or methacrylic acid, based on the total polymer.

Compl. Specn 25 pages.

Class : 32 B &amp; 140 B.

160172.

Int. Cl. : C10g 11/00.

## A PROCESS FOR PRODUCING A THERMALLY CRACKED PRODUCT GAS MIXTURE.

Applicant : TOYO ENGINEERING CORPORATION, A JAPANESE COMPANY, OF 2-5, KASUMIGASEKI 3 CHOME, CHIYOD-KU, TOKYO, JAPAN.

Inventors : TADAYOSHI TOMITA, KATSUTOSHI KIKUCHI, TAKAYUKI SAKAMOTO, TOSHIHIRO ISHIDA & ATSUSHI MORIYA.

Application for Patent No. 537/Del/1983 filed on 5th August, 1983.

Appropriate office for opposition proceeding (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

14 Claims

A process for producing a thermally cracked product gas mixture comprising hydrogen gas, carbon monoxide, carbon dioxide and lower hydrocarbons by the thermal cracking of heavy oil containing nonvaporizable, high molecular weight hydrocarbons in the presence of steam which process comprises feeding a fluid comprising said heavy oil and steam to a thermal cracking tube free of packing material and effecting the thermal cracking therein at a temperature of 800 to 1100°C, at a pressure of zero to 50 kg/cm<sup>2</sup>G, at a flow rate of said fluid of 10 to 100 m/sec, at a residence time in said tube of at least 0.2 sec.

Compl. Specn. 35 pages.

Drgs. 4 sheets.

CLASS : 32 F1, 55D2, and 55 E4.

160173.

Int. Cl. : CO 7d 55/00.

## A PROCESS FOR REPAIRING TRIAZOLE DERIVATIVES.

Applicant : PFIZER CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE REPUBLIC OF PANAMA, OF CALLE 151/2, AVENIDA SANTA ISABEL, COLON, REPUBLIC OF PANAMA.

Inventors : KENNETH RICHARDSON & PETER JOHN WHITTLE.

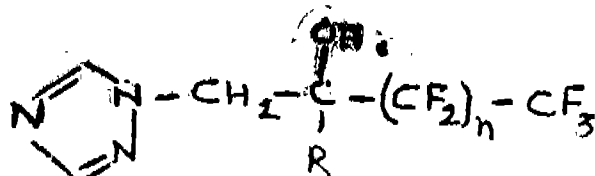
Application for Patent No. 550/Del/1983 filed on 10th August, 1983.

Convention Application No. 8223459 dated 14-8-1982 and 8231309 dated 2-11-1982 (both U.K.).

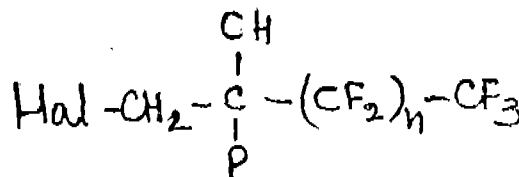
Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

7 Claims

A process for preparing a compound of the formula I



where R is a phenyl group optionally substituted by 1 to 3 substituents each independently selected from F, Cl, Br, I and trifluoromethyl; and n is zero, one or two; or a pharmaceutically acceptable salt thereof, characterised by reacting 1, 2, 4-triazole or an alkali metal salt thereof with a compound of the formula IV



where R and n are as defined above and "Hal" is Cl or Br, followed by, optionally, conversion of the product of the formula (I) into a pharmaceutically acceptable salt by a conventional method.

Compl. Specn. 18 pages.

Drgs. 5 sheets.

CLASS : 131 B.

160174

Int. Class : E21b—9/35, 9/36.

## AN IMPROVED CUTTER BIT.

Applicant : KENAMETAL INC., A CORPORATION OF THE COMMONWEALTH OF PENNSYLVANIA, OF P.O. BOX 231, LATROBE, PENNSYLVANIA-15650, U.S.A.

Inventors : ALEX GEORGE MCKENNA AND CLYDE GRANT HUTZELL.

Application for Patent No. 605/DEL/1983 filed on 5th September 1983.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(13 Claims)

An improved cutter bit comprising a shank means and an abutment means for insertion into a toolholder, said shank means having a forward working portion for engagement with the material to be cut, a hard wear resistant means with cutting edges mounted on said forward working portion, said cutting edges having sides tapering laterally outwards towards said shank means, and a clearance face behind said cutting edges characterised in that said hard wear resistant cutting means comprises at least two discrete wear resistant inserts with means securing said discrete inserts together, each of said discrete inserts having a cutting edge that tapers laterally outwards towards the shank of the bit, means being provided for reducing the rate of wear and



maintaining the taper of said cutting edges, which means comprises at least one elongate cylindrical insert of hard wear resistant material provided in a recess in said clearance face behind said hard wear resistant cutting means, an end portion of said at least one elongate cylindrical insert projecting above said clearance face to provide a surface for engaging the material to be cut.

(Complete Specification 20 pages) (Drawing 10 sheets)

CLASS: 69 F.

160175

Int. Class: H01h 7/00 & 9/00.

"ELECTRICAL SWITCH."

Applicant: SOCIETE ANONYME DE PARTICIPATIONS APPAREILLAGE GARDY", OF 15, RUE DE L'EVOLE 2000 NEUCHÂTEL, SWITZERLAND, A SWISS BODY CORPORATE.

Inventor: EDOUARD MANCINI.

Application for patent No. 695/Del/83 filed on 7th October, 1983.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(4 Claims)

An electrical switch for electrically connecting and disconnecting two electrical feeder bars said switch comprising a main contact and an auxiliary contact each connected with said feeder bars, each said main contact and auxiliary contact having a fixed contact member and a movable contact member and a driving mechanism for driving said movable contact members of said main contact and said auxiliary contact, characterised in that a common drive shaft of said driving mechanism couples said movable contact members to impart simultaneous drive to said movable contact members, the movable contact member of said auxiliary contact being rigidly secured to said drive shaft to provide engagement of said movable contact member of said auxiliary contact with the fixed contact member of said auxiliary contact within a predetermined turning range of said drive shaft and to move said movable contact member of said auxiliary contact out of engagement with said fixed contact member of said auxiliary contact beyond said predetermined turning range of said drive shaft, said main contact being located in a vacuum cartridge and said movable contact member of said main contact being slidable in said cartridge into and out of engagement with the fixed contact member of said main contact, said movable contact member of said main contact engaging means on said driving shaft to provide drive to said movable contact member of said main contact to move it into engagement with said fixed contact member of said main contact after said driving shaft has turned beyond said predetermined turning range.

(Complete specification 8 pages) (Drawing 1 sheet)

CLASS: 151 G.

160176.

Int. Class: F16 1 17/02.

"A SEALING RING FOR JOINT BETWEEN TWO FLUID CONVEYING PIPES."

Applicant & Inventor: MICHAEL JOHN POOK, A BRITISH CITIZEN OF C-4 COMMERCIAL CENTRES, SAFDARIJUNG DEVELOPMENT AREA, NEW DELHI-110 016. INDIA.

Application for Patent No. 715/Del/83 filed on 26th October, 1983.

Complete specification left on 25th October, 1984.

5-127 GI/87

Appropriate Office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(5 Claims)

An annular sealing ring for use in a joint between two fluid conveying pipes made of any known resilient material, and comprises a first arm and a second arm spaced from each other at one end and joined together at their other ends on one side by means of spaced radial webs, at least one of the arms having a plurality of spaced sealing surfaces in the form of teeth, serrations or grooves provided on the outer surface thereof, the zone between two adjacent sealing surface thereof being a captive or collection zone for particles of dirt or other foreign material brought in by the fluid, the inner surface of at least one of the arms being also provided with additional spaced sealing surfaces in the form of teeth, serrations or grooves.

(Provisional Specification 4 pages).

(Complete specification 8 pages) (Drawing 1 sheet)

CLASS: 98 A, 157 B.

160177

Int. Class: B60p 3/22, 861c 17/02.

"A HEATED RAILWAY TANK CAR."

Applicant: RICHARD P. LOEVINGER, A U.S. CITIZEN OF P.O. BOX 68, BRANDON, STATE OF SOUTH DAKOTA, U.S.A.

Inventor: RICHARD P. LOEVINGER.

Application for Patent No. 735/Del/1983 filed on 3rd November 1983.

Convention date 30th May 1983/429153/(Canada).

Appropriate Office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(19 Claims)

A heated railway tank car comprising :

a horizontally disposed lading tank having opposite ends, side walls extending between said opposite ends and top and bottom portions, said tank being provided with at least one inlet and one outlet;

heat exchanger means mounted within said tank spaced above said bottom portion thereof;

said heat exchanger means having an interior compartment for receiving therein a heated medium for heating the lading in said tank above said heat exchanger means;

said heat exchanger means being provided with at least one inlet for the introduction of said heated medium to said interior compartment and at least one outlet for said medium in fluid communication with said inlet;

said interior compartment of said heat exchanger means being provided with sufficient slope to permit substantially total drainage of said heated medium therefrom.

(Complete specification 27 pages) (Drawing 3 sheets)

160178

CLASS: 107 F.

Int. Class: F02p 9/00, 19/02.

"AN EMERGENCY IGNITION DEVICE FOR THERMAL ENGINEERS WITH CONTROLLED IGNITION."

Applicant: PATRICK DE BEAUMONT, A FRENCH CITIZEN OF 119, RUE NOTRE-DAME DES CHAMPS, 75005 PARIS FRANCE AND PIERRE VIOLETTE A FRENCH CITIZEN OF 10, RUE MARCEL LAMOUR, 92230, GENNEVILLIERS, FRANCE.

Inventors : PATRICK DE BEAUMONT AND PIERRE VIOLANTE.

Application for Patent No. 750/Del/83 filed on 10th November, 1983.

Appropriate Office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-110005.

(2 Claims)

An emergency ignition device for thermal engines with controlled ignition, wherein said engines comprises a starter, a plurality of cylinders, and a plurality of spark plugs connected to said cylinders, wherein said device comprises an ignition circuit comprising :

- (a) an ignition coil having a primary and a secondary winding connected to said spark plugs of said plurality of cylinders of the engine;
- (b) an oscillator adapted to operate at a first relatively low frequency and a second frequency higher than said first frequency;
- (c) a stabilised electrical supply, connected to said oscillator;
- (d) a power transistor connected in series with said primary winding of said ignition coil, wherein the output of said oscillator is connected to said power transistor;
- (e) a control switch connected to the oscillator, biased into an open position, wherein said switch is adapted to be closed at the same time and as long as said starter is actuated to rotate the engine;
- (f) means for modifying the operational frequency of said oscillator, depending on whether said control switch is open or closed, so that said oscillator operates at said first frequency as long as said control switch is closed and at second frequency when said switch is open; and
- (g) a time delay circuit connected to said oscillator and said control switch so as to inhibit operation of the oscillator during a predetermined period of time after the instant of closure of said control switch and then to allow said oscillator to operate at said first frequency as long as said control switch is maintained closed.

(Complete specification 9 pages

Drawing 1 sheet).

CLASS : 32 F<sub>9</sub> (a).

160179

Int. Class : C 07 C—87/00.

#### A PROCESS FOR THE PRODUCTION OF 4-NITRO-DIPHENYLAMINES.

Applicant : BAYER AKTIEGESELLSCHAFT, A BODY CORPORATE ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, OF LEVERKUSEN, BAYERWERK, FEDERAL REPUBLIC OF GERMANY, MANUFACTURERS.

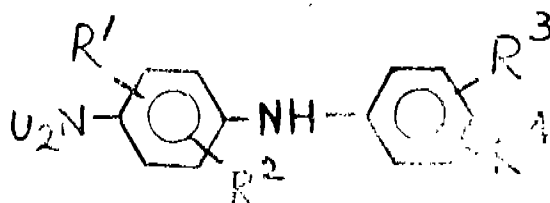
Inventor : ERNST WILLI MULLER.

Application for Patent No 751/DEL/1983 filed on 10th November, 1983.

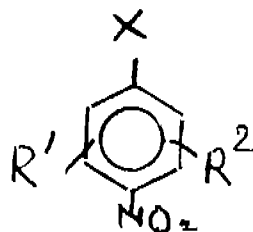
Appropriate Office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-110005.

(8 Claims)

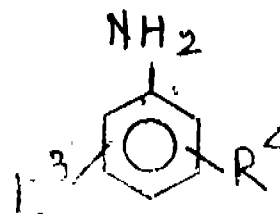
A process for the production of 4-nitrodiphenylamines of the general formula I



wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are the same or different and represent hydrogen or an alkyl radical having from 1 to 9 carbon atoms comprising reacting 4-nitrohalogen benzene of the formula II



wherein X represents chlorine or bromine and R<sup>1</sup> and R<sup>2</sup> are as defined above with primary aromatic amines of the formula III



wherein R<sup>1</sup> and R<sup>2</sup> are as defined above in the presence of potassium carbonate and copper compounds of the kind such as herein described characterised in that rubidium or cesium compounds of the kind such as herein described or mixtures of the two are added to the reaction mixture, said rubidium or cesium compound are used in molar quantities which correspond to from 0.05 to 5 g of cesium carbonate, and the copper catalyst is used in a quantity of from 0.001 to 0.1 mols, in each case based on mol of nitrohalogen benzene which is used and the reaction is carried out at a temperature from 140 to 225°C.

(Complete specification 10 pages)

(Drawing one sheet)

CLASS : 85P.

160180.

Int. Class : F 27 b 1/00.

#### A SHAFT FURNACE INCLUDING THE CHARGING DEVICE PROVIDED WITH A COOLING APPARATUS THEREFOR.

Applicant : PAUL WURTH S.A., OF 32 RUE D'ALSACE, LUXEMBOURG, GRAND-DUCHY OF LUXEMBOURG, A COMPANY ORGANISED UNDER THE LAWS OF LUXEMBOURG.

Inventor : EDOUARD LEGILLE, GILBERT BERNARD, GUY THILLEN & GIOVANNI CIMENTI.

Application for Patent No. 774/Del/83 filed on 22nd November, 1983.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## (14 Claims)

A shaft furnace including the charging device provided with a colling apparatus therefor, said charging device comprising a fixed feed channel positioned vertically in the centre of the head of the furnace, a rotary housing mounted coaxially around said feed channel, said rotary housing having first and second sections, a fixed outer frame mounted coaxially about said first housing section, a distribution spout being pivotally mounted to said second housing section, first driving means which urges said housing and said spout to rotate as a single unit about said furnace axle and said feed channel, and a second driving means which causes said spout to pivot about the axle by which it is suspended from said second housing section, said cooling apparatus including :

annular feed vat attached to upper edge of said rotary housing;

an annular block fixed to said outer frame and closing one end of said vat, at least one opening being provided in said block, said opening being in communication with said vat;

said feed vat comprising a first concentric wall and a second concentric wall, said first and second concentric walls having first and second side edges respectively;

feed pipe means connected to said opening whereby cooling water is gravity fed therethrough into said vat;

at least one cooling coil attached to said second housing section;

first connecting pipe means providing communication between said vat means and said cooling coil whereby cooling water may be gravity fed therethrough ;

collecting conduit means fixed to the bottom portion of said outer frame; and

second connecting pipe means providing communication between said cooling coil and said collecting conduit means whereby water gravity flows between said annular feed vat means and said collecting means.

(Complete specification 13 pages

Drg. 3 sheets).

Class : 32 E.

160181

Int. Class : C 0 8 f - 1/58.

# "A PROCESS FOR THE POLYMERIZATION OF A MONOMER".

Applicant : UNIROYAL, INC., a corporation organised under the laws of the State of New Jersey, one of the United States of America, having an office at 1230 Avenue of the Americas, New York, New York 10020, U.S.A.

Inventors : JAMIL AKBER KHAN  
WALTER NUDENBERG  
DAVID JOHN SMUDIN  
DEMETREOS NESTOR MATTHEWS

Application for Patent No. 818/DEL/1983 filed on 5th December, 1983.

Appropriate office for filing opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005

## (4 Claims)

A process for the polymerization of a monomer selected from the group consisting of ethylene, ethylene and at least one compound of the formula  $\text{CH}_2=\text{CHR}^1$  where  $\text{R}^1$  is  $\text{C}_1$ - $\text{C}_{10}$  alkyl and ethylene, at least one compound of the formula  $\text{CH}_2=\text{CHR}^1$  where  $\text{R}^1$  is  $\text{C}_1$  to  $\text{C}_{10}$  alkyl and a non-conjugated polymerizable diene comprising the polymerizing of said mono-

mer in the presence of a catalyst of a compound of the formula  $(\text{O})_n \text{V}(\text{OCH}_2\text{R})_p (\text{OR}^1)_q \text{X}_m$  where R is a tertiary alkyl having 4 to 18 carbon atoms;  $\text{R}^1$  is a  $\text{C}_1$ - $\text{C}_{18}$  alkyl, or if q is 2,  $\text{R}^1$  can also be  $\text{C}_2$ - $\text{C}_8$  linear or branched alkylene; x is chlorine, bromine or iodine; n is 0 or 1; if n is 0 then m is 0, 1, 2 or 3; p is an integer of 1 to 4; and q is 4-(p+m); if n is 1 then m is 0, 1 or 2; p is 1, 2 or 3; and q is 3-(p+m) and a compound of the formula  $\text{R}^2\text{rA IX}^2$  where  $\text{R}^2$  is  $\text{C}_1$ - $\text{C}_{12}$  alkyl or  $\text{C}_7$ - $\text{C}_9$  aralkyl;  $\text{X}^2$  is a halogen atom; r is 1, 1.5, 2 or 3; and s is 3-r.

(Complete specification No. 19 pages

Drg. one Sheet)

CLASS : 56E

160182

INT. CLASS : CO7c-15/00.

# "PROCESS FOR RECOVERY OF AROMATIC HYDROCARBONS AND A NONAROMATIC RAFFINATE STREAM FROM A HYDROCARBON CHARGE STOCK".

Applicant : UOP INC., a corporation organised in the State of Delaware, with its principal place of business at Ten UOP Plaza, Algonquin and Mt. Prospect Road, Des Plaines, Illinois, U.S.A.

Inventor : GEORGE FRANCIS ASSELIN.

Application for Patent No. 227/DEL/83 filed on 6th April, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## (6 Claim)

1. A process for the recovery of aromatic hydrocarbons and a nonaromatic raffinate stream from a hydrocarbon charge stock which comprises;

(a) treating said charge stock in an extraction zone in contact with an aromatics-selective solvent composition of the kind such as herein described in a known manner to provide an aromatics-rich solvent stream and a first raffinate stream comprising non-aromatic hydrocarbons and residual solvent;

(b) treating said aromatics-rich solvent stream in a first separation zone in a known manner to separate substantially all of the non-aromatic hydrocarbons therefrom;

(c) treating the resulting aromatics-rich solvent stream in a second separation zone in contact with stripping steam in a known manner to provide a high purity aromatics stream, first aqueous stream comprising steam condensate and residual aromatics, and a lean solvent stream substantially free of aromatic hydrocarbons;

(d) returning said lean solvent stream to said extraction zone;

(e) treating said residual aromatics-containing first aqueous stream in a first contacting zone in contact with a monor portion of said first raffinate stream in a manner such as herein described to provide a second aqueous stream substantially free of aromatic hydrocarbons, and an aromatic containing second raffinate stream;

(f) returning said second raffinate stream to said extraction zone;

(g) treating the remaining portion of said first raffinate stream in a second contacting zone in contact with said second aqueous stream in a known manner to provide a solvent containing aqueous stream and a raffinate stream substantially free of aromatic hydrocarbons and solvent composition; and,

(h) receiving in a known manner said aromatics-free raffinate stream.

(Complete specification 15 Pages) (Drawing 2 sheets).

CLASS : 108C<sub>2</sub> [XXXIII(5)]

160183

INT. CLASS : C 21c 5/52.

**"A METHOD OF MAKING STEEL".**

Applicant(s) : VSESQJUZNY NAUCHNO-SSLEDOVATELSKY INSTITUT ZHELEZNODOROZHNOGOE TRANSPORTA URALSKOE OTDEIENIE of ulitsa Cheljuskintsev, 15, Sverdlovsk, USSR, a U.S.S.R. company.

Inventor(s) : ROMAN ZAKHAROVICK KATS, NIKOLAI YAKOVLEVICH SAMARIN, ALEXANDRA GRIGORIEVICH TSARENKO AND TAISIA YAKOVLEVNA DATSENKO AND VITALY ANTONOVICH STARTSEV.

Application for Patent No. 340/DEL/1983 filed on 24th May, 1983.

Appropriate for office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**(2 Claims)**

A method of making steel having a manganese content of at least 8% by weight in a basic-lined electric arc furnace, which comprises,

(1) placing lime on the hearth of the furnace in an amount of 3.0 to 5.0% by weight with respect to the charge,

(2) introducing a charge containing 1.5 to 3.0% by weight of iron ore, on top of the lime,

(3) melting the charge to form a layer of molten metal and a supernatant layer of oxidising slag whereby the impurities are oxidised,

(4) removing the oxidising slag and replacing it with another slag layer comprising a mixture of lime and grog or freshly prepared lime, grog and fluorite,

(5) effecting diffusion deoxidation of the molten metal for at least 5 minutes by adding aluminium and a mixture of lime, a carbonaceous material, ferrosilicon, and fluorite to the slag layer, the amount of aluminium being from 1.0 to 1.5kg per ton of molten metal and the amount of the mixture being from 8 to 10kg per ton of molten metal and the weight ratio of the components of the mixture being (3.0-6.0) : (1.5-2.0) : (1.0-1.5) : (1.0-1.5), respectively,

(6) adding ferromanganese to introduce manganese into the molten metal and simultaneously effecting reduction refining of the molten metal by adding a mixture of lime, a carbonaceous material, and ferrosilicon to the slag layer, the amount of the mixture being from 6 to 8kg per ton of molten metal and the weight ratio of the components of the mixture being (3.0-6.0) : (1.0-1.5) : (0.5-1.0) respectively, the ferromanganese and the mixture being added to the slag in a plurality of successive portions at 10 minutes intervals and the alloying and reduction refining being continued for at least 8 minutes after the addition of the last portion,

(7) effecting further reduction refining of the metal by adding a mixture of lime, a carbonaceous material, and aluminium to the slag layer, the amount of the mixture being from 5 to 10 kg per ton of molten metal and the weight ratio of the components of the mixture being (3.0-6.0) : (1.0-1.5) : (2.0-3.0), respectively, this step being continued for at least 15 minutes, and

(8) deoxidising the molten metal by adding aluminium in an amount of from 1.0 to 0.3 kg per ton of molten metal.

(Complete Specification 23 Pages) (Drawings No Sheets).

CLASS : 127 I.

160184

INT. CLASS : F16h 47/00, 41/00.

**"COMPOUND HYDROMECHANICAL TORQUE CONVERTER FOR TRANSMISSION OF MECHANICAL POWER".**

Application : BHARAT HEAVY ELECTRICALS LIMITED, 18-20 Kasturba Gandhi Marg, New Delhi-India, an Indian Company.

Inventor : THORALI MUNISWAMY KRISHNA RAO.

Application for patent No. 780/Del/83 filed on 24th November, 1983.

Complete specification left on 19th November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

**(2 Claims)**

A compound hydro-mechanical torque converter for transmission of mechanical power comprising a hydraulic torque converter having a pump, a main turbine, a complementary turbine rotating in a direction opposite to that of the main turbine and a deflector turbine rotating in the same direction as the main turbine, said converter and turbines being arranged sequentially and in the order stated in the direction of fluid flow, the complementary turbine transmitting power to the converter through a constant ratio gearing during a specified slow speed range said complementary turbine being connected through a variable speed friction drive to said converter during a specified medium speed range, said pump being connected to an input shaft of said converter, the main turbine being directly connected to an output shaft of the converter, said deflector turbine being coupled to the main turbine through an inner freewheel mounted within the core of the hydraulic torque converter, the complementary turbine, during a speed range from stall to a pre-determined low speed ratio being connectable to the output shaft of the converter through a speed reversing planetary type gear set having stationary carrier for planet position gears, a sum gear coupled to the complementary turbine through a first free wheel and a ring gear coupled to said output shaft through a second free wheel.

(Provisional specification 38 pages).

(Complete specification 43 pages Drawing 11 sheets).

CLASS : 187a &amp; H

160185

INT. CLASS : HO4m 3/42.7/00.

**"APPARATUS IN A TELECOMMUNICATION FOR ACTIVATING SUBSCRIBERS TERMINALS IN A DIGITAL SUBSCRIBER CONNECTION".**

Applicant : TELEFONAKTIEBOLAGET L M ERISSON, of S-126 25 Stockholm, Sweden, a Swedish Company.

Inventor : INGEMAR ERIK DAHLQVIST.

Application for patent No. 821/Del/83 filed on 6th December, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

**(2 Claims)**

Apparatus in a telecommunication system for activating means from an idling state to active state, there being included in the system a digital transmission link consisting of a subscriber side including a network terminal (NT) assigned to the subscriber, and a station side including a line terminal (LT) assigned to the station, said line terminal being connected to a clock pulse oscillator (CLM) constituting the master clock for the system, and said network terminal being connected to a local clock pulse oscillator (CLS) constituting a slave clock, characterized in that, in order to obtain a fast and accurate activation by means of a technically simple embodiment, in activation from the network terminal (NT) a first send control means (SI) having a first input connected to an activation request signal output (AR) of a subscriber, and a first output connected to a first input of a first data switch (DSI), a second input of which being connected to the output of a first code transmitter (KSI), the output of said first data switch (DSI)

being connected to a first input of a first through connection circuit (FF3), a second input of which being connected to a second output of said first send control means (SI), the output of said circuit (FF3) being connected to a first input of a first adaptive hybrid circuit (AG1) the output of which being connected to a transmission line (L), which being connected to a first input of a second adaptive hybrid circuit (AG2) included in a line terminal (LT), an output of said second hybrid circuit being connected to an input of a first code receiver (CDI) the output of which being connected to a first input of a second send control means (SZ) and to a first input of an AND-circuit (OI) having an activation request signal output (AR) connected to said station, said station having an activation order signal output (AO) connected to an activation order input of said second send control means (SZ) and to an input of an inverter (I) the output of which being connected to a second input of said AND-circuit (OI), a first output of said second send control means being connected to a first input of a second data switch (DSZ) a second input of which being connected to the output of a frame code generator (RGZ) the input of which being connected to said station, an output of a second code transmitter (KSZ) being connected to a third input of said second data switch (DSZ) the output of which being connected to a first input of a second through connection circuit (FF5), a second input of which being connected to a second output of said second send control means (SZ), the output of said second through connection circuit (FF5) being connected to an input of said second hybrid circuit (AG2), which having an output connected to an input of said first hybrid circuit (AG1) through said line (L), said first hybrid circuit having a second output connected to an input of a master clock controlled local clock pulse oscillator (CLS), a third output of said first hybrid circuit (AG1) being connected to an input of a first frame detector (RDI) and to an input of a second code detector (CDZ) which having a control signal output connected to a second input of said first send control means (SI), said first frame detector having a first activation order output connected to the subscriber and a second and a third output connected to third and fourth inputs of said first send control means respectively, a further frame code generator (RGI) having an output connected to a third input of said first data switch (DSI), and a second frame detector (RDZ) in the line terminal (LT), having an input connected to the output of said second hybrid circuit (AG2) and an acknowledgement signal output (RS) connected to the station.

(Complete specification 8 pages Drawing 1 sheet).

CLASS : 187 C<sub>3</sub>H 160186

INT. CLASS : H 04 m.

"APPARATUS N A TELECOMMUNICATION SYSTEM FOR ACTIVISING SUBSCRIBER TERMINALS IN A DIGITAL SUBSCRIBER".

Applicant : TELEGNOKTIEBOLAGET L M ERICSSON, of S-126 25 Stockholm, Sweden, a Swedish Company.

Inventor : HANS-JORG FRIZLEN.

Application for Patent No. 823/DEL/83 filed on 6th December, 1983.

Appropriate office for opposition proceeding (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(2 Claims)

Apparatus in a telecommunication system in activation of subscriber terminals in a digital subscriber connection including a line terminal assigned to the station side of the system, a network terminal assigned to the subscriber installation and one or more subscriber terminals, the line terminal being connected to a central clock pulse oscillator on the station side and the network terminal as well as the subscriber terminals containing local clock pulse oscillators, characterized in that a subscriber terminal (ST) includes first transmitter equipment (KGI) having an input connected to an activation request signal output (AR) of a subscriber, and a further input connected to the output of a first local clock pulse oscillator (CLI), said transmitter equipment (KGI) having an activation request bit burst output connected to the input of a TDM bus line (BL) an output of which being connected

to the input of a first received equipment (MI) in a network terminal (NT) assigned to the subscriber side, the output of said first receiver equipment (MI) being connected to an activation input of a second local clock pulse oscillator (CL2), and to the input of a second transmitter equipment (SI) having an activation request output connected to the input of a transmission line (SL) said second transmitter (SI) having inputs connected to outputs of a third local clock pulse oscillator (CL3),

a line terminal (LT) assigned to the station side includes a second receiver equipment (M2) having inputs connected to outputs of said transmission line (SL) which second receiver equipment (M2) having an activation request output (AR) connected to a corresponding input of said station (EX), a third transmitter equipment (S2) having an activation order signal input (AD) connected to a corresponding output of said station (EX), and control inputs connected to control outputs of a central clock pulse oscillator (MCL), said third transmitter (S2) having an activation order output connected to inputs of said local clock pulse oscillators (CL2, CL3) of the network terminal (IVT), and to inputs of a third receiver equipment (M3), having outputs connected to inputs of said TDM bus line (BL),

a fourth transmitter equipment (KG3), having a control input connected to an output of said third local clock pulse oscillator (CL3), and having an activation order bit burst signalling output connected to a further input of said TDM bus line (BL) the outputs of which being connected to synchronizing signals back again to the subscriber terminal (ST) for inputs of a fourth receiver equipment (M4), the output of which being final synchronization connected to an input of said first local clock pulse oscillator (CLI) to the rate from the central clock (MCL) and for final activation of and to activation inputs of a synchronized control circuit (SC2) the output of the logical circuits of the subscriber terminal which being connected to corresponding inputs of the subscriber.

(Compl. Specn. 15 pages.

Drg. 2 sheets.)

CLASS : 172D.

160187

Int. Class : D01h 1/00.

"AN INCLINED PLANE SPINNING MACHINE FOR NATURAL OR SYNTHETIC TEXTILE FIBRES."

Applicant : JAGMOHAN SINGH BINDRA, an Indian national, of 101, Kusal Bazar, 32-33, Nehru Place, New Delhi-110019.

Inventor : PETER TEAL.

Application for patent No. 826/Del/83 filed on 6th December, 1983.

Appropriate office for filing opposition proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

(Claims 5)

A spinning machine for spinning of natural or synthetic textile fibres comprising a track having a carriage, displaceably mounted thereon, said carriage containing a drafting mechanism, delivery rollers, or spindles characterized in that said track is inclined and that one end of said carriage is secured to a counterweight so that the carriage has a downward movement along the said inclined track against the resistance of said counterweight.

(Complete specification 8 pages.

Drawing 1 sheet).

CLASS : 108 2(a).

160188.

Int. Class : C21 B-5/00.

"A METHOD OF PRODUCING MOLTEN PIG IRON OR STEEL PREPRODUCTS—WITH SIMULTANEOUS PRODUCTION OF REDUCTION GAS".

**Applicant:** VOEST-ALPINE AKTIENGESellschaft, of 5, Muldenstrasse, A-4020 Linz, Austria, an Austrian company and KDRF ENGINEERING GmbH, of Neusser Strasse 111, D-4000 Dusseldorf 1, Federal Republic of Germany, a German company.

**Inventors:** Werner Kepplinger & Rolf Hauk.

Application for Patent No. 827/Del/1983 filed on 7th December, 1983.

Appropriate office for filing opposition proceedings (Rule 4, Patents Rule 1972), Patent Office Branch, New Delhi-110005.

#### (20 Claims)

A method of producing molten pig iron or steel preproducts with the simultaneous production of reduction gas which comprises adding carbon or coke particles to a first fluidized-bed zone located above a first blow-in plane, said carbon and coke particles being fluidized by the blowing in at said first blow-in plane of oxygen-containing gas which maintains said fluidized particles in heavy motion, adding to the said fluidized-bed zone iron sponge particles and/or pre-reduced iron ore particles a substantial portion of which are above 3 mm. in size, injecting below said first blow-in plane at a pre-determined into a further supply of oxygen-containing gas, said injection constituting a second blow-in plane located above the level of slag resulting from the reaction, whereby a second fluidized-bed one of coke particles with a weak or unnoticeable particle motion or a gaspassed solid bed of coke particles is provided between said first and second blow-in planes, the temperature within the second fluidized-bed zone being above the melting temperature of said sponge iron or pre-reduced ore particles.

(Complete Specification 22 pages Drawing one sheet)

Class : 98 I. 160189.

Int. Class : F 24j—3/02&H01 I-15/08.

"A LOW-COST SOLAR CELL".

**Applicant:** UNION CARBIDE CORPORATION, Manufacturers, organised and existing under the laws of the State of New York, located at Old Ridgebury Road, Denbury, State of Connecticut 06817, United States of America.

**Inventors:** PESHOTAN SOHRAB KOTVAL

HAROLD BUNSEN STROCK.

Application for Patent No. 832/DEL/1983 filed on the 12th December, 1983. (anti-dated to 21st December, 1981) Divisional to application No. 792/DEL/1981 filed on the 21st December, 1981 which is divided out of 829/DEL/1978 filed on the 20th November, 1978 (abandoned).

Appropriate office for filing opposition proceedings (Rule 4, Patents Rule 1972), Patent Office Branch, New Delhi-110005.

#### 9 Claims

A low-cost solar cell comprising a p-type layer of a multi-grained refined silicon substrate having pentavalent n-type impurities diffused into one side of said substrate to form a p-n junction therein with electrical contacts affixed to the sides of said substrate, the silicon comprising said substrate having a resistivity of from 0.04 to 0.2 ohm-cm and impurity concentrations of up to but not exceeding approximately 1 ppm of aluminum, 1 ppm of iron, 2 ppm of titanium, 2 ppm of boron, 2 ppm of phosphorus, 1 ppm of chromium, 1 ppm of calcium and 1 ppm of magnesium.

(Complete specification 45 pages)

Class : 86D & 74.

160190.

Int. Class : A47g 27/02 & A47C 27/00.

"REMOVABLE LINING OR COVER ADAPTED TO RECEIVE AND/OR BE WRAPPED AROUND A THREE DIMENSIONAL ARTICLE AND METHOD FOR THE MANUFACTURE THEREOF".

**Inventor:** PIERO BASSETTI.

Application for patent No. 861/Del/83 filed on 26th December, 1983.

Appropriate office for filing opposition proceedings (Rule 4, Patents Rule 1972), Patent Office Branch, New Delhi-110005.

#### (13 Claims)

A removable lining or cover adapted to receive and/or be wrapped around a three dimensional article, said lining being composed of woven or non woven fabric and having an essentially quadrilateral outline, said fabric being folded over at its lateral longitudinal edges to provide a pair of oppositely disposed folds, the said fabric being provided adjacent its four corners with seams which secure the two ends of each fold to the main body of said fabric.

(Complete specification 13 pages Drawing 3 sheets).

Class : 39K & 98I.

160191.

Int. Class : F24 J-3/02 & H01 I-15/08.

PROCESS FOR THE PREPARATION OF A LOW-COST REFINED METALLURGICAL SILICON ADAPTED TO BE EMPLOYED IN SOLAR CELLS AS A PLANNER DIODE SUBSTRATE.

**Applicant:** UNION CARBIDE CORPORATION, Manufacturers, organised and existing under the laws of the State of New York, located at Old Ridgebury Road, Denbury, State of Connecticut 06817, United States of America.

**Inventors:** PESHOTAN SOHRAB KOTVAL HAROLD BUNSEN STROCK.

Application for Patent No. 792/DEL/1981 filed on 21st December, 1981. (Anti-dated to 20th November, 1978) Divisional to application No. 829/DEL/1978 filed on the 20th November, 1978 (abandoned).

Appropriate office for filing opposition proceedings (Rule 4, Patents Rule 1972), Patent Office Branch, New Delhi-110005.

#### (11 claims)

A process for the preparation of a low cost refined metallurgical silicon adapted to be employed in solar cells as a planer diode substrate which comprises;

(a) precipitating silicon platelets from a solution of metallurgical grade silicon in a liquid metal solvent of the kind such as herein described and recovering in any known manner the partially purified, essentially iron-free silicon platelets with adherent impurities derived from said metal solvent;

(b) melting said recovered partially purified silicon platelets in contact with acid silica slag in a melting zone whereby the resulting slag oxidation removes said adherent impurities from said silicon; and

(c) removing said slag and solidifying the silicon to produce a low-cost, refined multigrained metallurgical silicon.

(Complete specification 46 pages).

Class : 128G.

160192.

Int. Class : A61b 19/00.

"A PROCESS FOR THE PREPARATION OF ANTIGEN STRIPS OF DISCS FOR CONDUCTING TESTS RELATING TO CONTACT DERMATITIS".

**Applicant :** THE DIRECTOR, ALL INDIA INSTITUTE OF MEDICAL SCIENCES, Ansari Nagar, New Delhi-110016, India.

**Inventor :** JAGJIT SINGH PASRICHA.

Application for Patent No. 701/Del/80 filed on 29th September, 1980.

Appropriate office for filing opposition proceedings (Rule 4, Patents Rule 1972), Patent Office Branch, New Delhi-110005.

### (2 Claims)

A process for the preparation of antigen strips or discs for use in patch tests for contact dermatitis comprising in soaking a previous sheet in a solution or extract of an antigen agent until said sheet has a uniform distribution of said agent therein and thereafter drying said sheet characterized in that said antigen agent is selected from nitrofurazone prepared by adding at least adding at least 2% by weight of nitrofurazone to water to prepare a solution thereof.

(Complete specification 6 pages).

Class : 31B

160193

Int. Class : H01f-17/04, H02k-3/04.

"AN ELECTRIC SHUNT INDUCTION WINDING".

**Applicant :** ALSTHOM-ATLANTIQUE, of 38, Avenue Kleber 75784 Paris Cedex 16, France, a French body corporate.

**Inventors :** GERAD MESSE, MICHEL FAURE AND MARCEL DUCOMBS.

Application for Patent No. 293/DEL/1981 filed on 11th May 1981.

Appropriate office for filing opposition proceedings (Rule 4, Patents Rule 1972), Patent Office Branch, New Delhi-110005.

### (3 Claims)

An electric shunt induction winding for an electricity power transport line, said winding has a magnetic core with an electric coil and a magnetic barrel winding round the coil to close the magnetic circuit, said magnetic core comprising a air gaps, each disk having a central hole and being constituted by juxtaposing a plurality of sector-shaped portions, each sector-shaped portion comprising a succession or magnetic laminations situated in vertical planes which are parallel to the axis of the electric winding, wherein each said sector-shaped portion is formed by at least a first bundle of laminations all of identical length and by a second bundle of laminations of regularly decreasing lengths from one lamination to the next wherein the direction in which the laminations are rolled in the mill is perpendicular to the axis of the winding.

(Complete specifications 10 pages. Drawing 4 sheets)

CLASS : 32 F 2 b.

160194

Int. Cl. : C 07d-55/00

A PROCESS FOR THE SYNTHESIS OF 2-ARYL-S-(2', 1'; 6, 1) PYRIDO-(3, 4-b)-INDOLE-4-THIONES.

**Applicant :** COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, OF RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

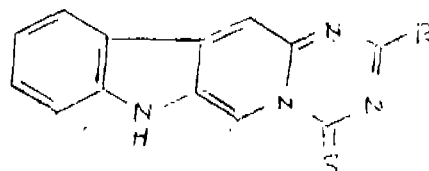
**Inventors :** SHIV KUMAR AGARWAL, ANIL KUMAR SAXENA, BRAJESH MAI AVIYA, HARISH CHANDRA AND NITYA ANAND.

Applicant for Patent No. 537/DEL/1981 filed on 22nd August '81.

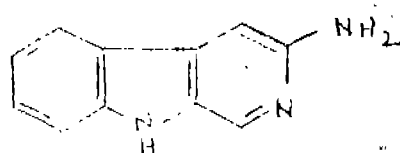
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 3 Claims

A process for the synthesis of 2-aryl-S, triazino-(2', 1'; 6, 1) pyrido (3, 4-b) indole-4-thione of formula (I)



wherein R is an aryl radical which comprises reacting arylisothiocyanate with 3-amino-9H-pyrido (3, 4-b) indole of formula (II)



in the presence of nonpolar solvents.

Complete specification 5 pages)

(Drawing 1 sheet)

CLASS : 90A, I.

160195

Int. Cl. : C03b 25/00.

A PROCESS FOR THE PREPARATION OF HEAT RADIATION FILTERS AND HEAT RADIATION FILTERS PREPARED THEREBY.

**Applicant :** ATUL GLASS INDUSTRIES (PVT.) LTD., AN INDIAN COMPANY OF 14/1, MILE STONE, MATHURA ROAD, FARIDABAD-121003, (HARYANA), INDIA.

**Inventors :** OM PRADASH GULATI LAKSHMI KANT AGGARWAL, KISHAN LAL AND PREM PRAKASH GANDHI.

Application for patent No. 619/Del/81 filed on 25th September, 1981.

Divided out of application for patent No. 683/Del/80 filed on 22nd September, 1981.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 15 Claims

A process for the preparation of heat radiation filters as described herein capable of reflecting a part of the heat radiation incident thereon comprising the steps of pretreating a glass substrate or base such as a glass sheet applying a coating composition comprising a solution of a metal acetyl acetonate the metal constituent of which being one or more selected from a group consisting of aluminium, nickel, copper, cadmium, manganese, indium and palladium and at least one from another group consisting of iron cobalt and chromium, by spraying at a pressure of 1 to 5 kg/cm<sup>2</sup> on at least one the receiver surface of the said pretreated substrate, heating said substrate to a temperature of between 450 to 700°C for a period such that the glass substrate has a uniform temperature, and finally subjecting the glass substrate to the step of tempering or annealing.

(Complete Specification 21 pages.);

CLASS : 154 (D+G).

160196

Int. Cl. G 03g, 13/00.

## AN ELECTROSTATIC COPYING MACHINE.

Applicant : TETRAS, A COMPANY ORGANISED UNDER THE LAWS OF FRANCE, OF 31 RUE D'ANJOU, 75008 PARIS, FRANCE.

Inventor : LIONEL BROOMFIELD HOFFMAN.

Application for Patent No. 747/Del/1982 filed on 11th October, 1982.

Appropriate Office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-5.

## 41 Claims

An electrostatic copying machine comprising :

(A) a housing for the machine having a top wall, a base, a front end wall, a rear end wall opposite the front end wall and opposite side walls,

(B) an imaging system within the housing and comprising a flexible electrophotographic belt generatrix, rollers supporting the belt in a primarily horizontally extending elongate tensioned oval loop providing an upper and a lower reach, driving means for rotating at least one of the rollers for moving belt in its loop, an exposure station adjacent the upper reach where a narrow strip-like pattern of light is applied by illuminating and projecting means across the belt progressively to form a latent image across the belt and along the belt as it moves past the exposure station in a pre-determined direction, a charging station including means for charging the belt surface across its width located adjacent the exposure station and upstream thereof whereby to charge the belt surface progressively just before the belt passes through the exposure station,

(C) means for moving a patterned original document progressively along said top wall and means for projecting the illuminated pattern of said original document from said top wall into the interior of the housing and to said exposure station in synchronism with the movement of the belt whereby the illuminated pattern provide said narrow strip-like pattern of light selectively to discharge the charged surface progressively to form said latent image.

(D) a toning station downstream of the exposure station and adjacent one of the said rollers having means for toning the latent image to develop the same on the belt surface progressively as the belt carries the latent image around said one roller and onto the lower reach of the belt,

(E) an image transfer station adjacent the lower reach of the belt for transferring the developed image carried to the lower reach onto a sheet of carrier medium,

(F) said rear end wall comprising an arcuate magazine hold, a supply of carrier medium sheets, said magazine including an interior arcuate chamber for the supply of sheets and having a top entrance located at the juncture of the magazine with the top wall and presenting a vertical passageway into said chamber for receiving said supply, said magazine having a discharge port close to said base and spaced inwardly toward the front end wall away from a vertical plane which is substantially tangent to the magazine adjacent the top entrance, the discharge port providing a horizontal passageway for egress of sheets of carrier medium from said magazine, the chamber being smoothly curved from vertical to horizontal,

(G) means for stripping a single sheet from the supply of carrier medium sheets in the magazine at the discharge port and feeding the same to the image transfer station in synchronism with the movement of the belt and in timed relation to the developed image arriving from the toning station and

(H) means for moving the sheet after it has passed through the transfer station out of the housing past the front end wall.

(Complete specification 69 pages) (Drawing 4 sheets)

CLASS : 32 B.

160197

Int. Cl. : C 07c 15/08.

## A CATALYTIC PROCESS FOR THE ISOMERISATION OF ALKYL AROMATIC COMPOUNDS.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT, (ACT XXI OF 1860).

Inventors : SAVITA VISHNOL SUBRAMANIAN SIVASANKER AND PAUL RATNASAMY.

Application Patent No. 769/DEL/1982 filed on 23rd October, 1982.

Appropriate Office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-5.

## 4 Claims

A catalyst process for the isomerisation of alkyl aromatic compound comprising contacting an alkyl aromatic compound feed and hydrogen feed with a catalyst prepared by the process described and claimed in our copending application No. 768/DEL/82 by treating dealuminated crystalline sodium mordenite with aqueous ammonium salt solution to obtain crystalline ammonium mordenite, subjecting the same to calcination by known methods, treating the calcined reaction product with a platinum salt solution and then with an aqueous calcium salt solution.

(Complete Specification 6 pages).

CLASS : 98 I.

160198

Int. Cl. : F24j 3/02.

## A DEVICE FOR THE SOLAR HEATING OF A LIQUID.

Applicant : DR. ALFRED BOETTCHER, A GERMAN CITIZEN OF HANGSTRASSE 11, 5100 AACHEN, WEST GERMANY.

Inventor : DR. ALFRED BOETTCHER.

Application for patent No. 857/Del/82 filed on 23rd November, 1982.

Appropriate Office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-5.

## 7 Claims

A device for the solar heating of a liquid (1), comprising a solar collector (7) with an overflow line (5) disposed on the far side of the solar collector (7) wherein the overflow line (5) leads to a tank (3) disposed at approximately the same level as the solar collector (7), the overflow level (4) of the overflow line (5) is situated above the level (2) of the column of liquid disposed in the tank (3) or in a heat exchanger (17) provided in the tank, and the column of liquid communicates with that in the solar collector (7) by the lower supply line thereof.

(Complete specification 9 pages Drawing 1 sheet).

CLASS : 97 F.

160199

Int. Cl. : H 05 b — 7/00.

## A PROCESS FOR MANUFACTURE OF MAGNETIC MATERIAL HAVING IMPROVED CORE LOSS BY LOCAL HEAT TREATMENT OF ELECTRICAL STEEL.

Applicant : ARMCO INC., A CORPORATION OF THE STATE OF OHIO, OF 703 CURTIS STREET, MIDDLETOWN, OHIO, U.S.A.

Inventors : JERRY WILLIAM SCHOEN AND RUSSEL LYNN YOUNG.

Application for Patent No. 711/DEL/1983 filed on 21 October 1983.



Appropriate Office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-5.

#### 6 Claims

A process for manufacture of magnetic material having improved core loss of the type having a plurality of magnetic domains and fully developed magnetic characteristics, said magnetic material being cube-on-edge regular grain oriented silicon steel strip, cube-on-edge oriented high permeability grain oriented silicon steel strip, or cube-on-face oriented silicon steel strip, said magnetic material having been subjected to a high temperature anneal to develop its grain orientation, said magnetic material having an insulative coating thereon of a mill glass, an applied coating, or an applied coating over a mill glass, said process comprising the steps of subjecting said magnetic material, after said high temperature anneal, to a local heat treatment by radio frequency induction heating or radio frequency resistance heating at a frequency of at least about 450 kHz so as to produce in said magnetic material narrow parallel bands of heat treated regions with untreated regions therebetween, said heat treated bands having a length (x) of less than 1.5 mm and said heat treatment for each of said bands being accomplished in less than 0.5 seconds, and thereafter annealing said locally heat treated magnetic material at a temperature of at least about 800°C magnetic domain wall spacing of said magnetic material without degradation of said insulative coating.

(Complete Specifications 22 pages) (Drawing two sheets)

CLASS : 12 C

160200

Int. Cl. : C 21 d — 5/00.

#### PROCESS FOR MANUFACTURING CUBE-ON-EDGE GRAIN ORIENTED ELECTRICAL STEEL STRIP.

Applicant : ARMCO INC., A CORPORATION OF THE STATE OF OHIO, OF 703 CURTIS STREET, MIDDLETOWN, OHIO, U.S.A.

Inventors : JERRY WILLIAM SCHOEN AND RUSSEL LYNN YOUNG.

Application for Patent No. 710/DEL/1983 filed on 21 Oct. 1983.

Appropriate Office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-5.

#### 8 Claims

A process for manufacturing cube-on-edge grain oriented electrical steel strip of the type containing less than 6.5% silicon and having controlled secondary grain growth and improved core loss, said process involving a routing comprising reduction to hot band thickness, at least one stage of cold rolling, coating with an annealing separator and a final high temperature anneal during which the primary grains of the material are consumed by cube-on-edge secondary grains, characterised by the step of subjecting the steel strip to a local annealing treatment in a manner as herein described between completion of the first stage of cold rolling and the start of the said final high temperature anneal whereby to produce parallel bands of annealed regions across the strip with unannealed regions therebetween, said annealed bands containing primary grains larger than those of said unannealed regions, said primary grains of said annealed regions being of such size and said annealed bands having a length in the rolling direction of said strip such that the advance of growing secondary grains in said unannealed regions into said annealed bands is temporarily retarded during the initial portion of said final high temperature anneal and said enlarged primary grains of said annealed bands are essentially consumed during the final portion of said final high temperature anneal, whereby said finally annealed strip has secondary grains of reduced size improved core loss.

(Complete specifications 26 pages) (Drawings six sheets)  
6—127 G1/87

CLASS : 12C

160201

Int. Cl. : C21 d — 7/00.

#### PROCESS FOR PRODUCING COLD REDUCED SILICON STEEL STRIP AND HEET OF LESS THAN 0.30 mm THICKNESS HAVING THE CUBE-ON-EDGE ORIENTATION.

Applicant : ARMCO INC., A CORPORATION OF THE STATE OF OHIO, U.S.A., OF 703 CURTIS STREET, MIDDLETOWN, OHIO, U.S.A.

Inventor : MARTIN FREDERICK LITTMANN.

Application for Patent No. 172/DEL/1984 filed on 27th February 1984.

Appropriate Office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-5.

#### 13 Claims

A process for producing cold reduced silicon steel strip and sheet of less than 0.30 mm thickness having the cube-on-edge orientation, characterised by the combination of steps of providing a slab of silicon steel containing about 3% to about 3.5% silicon, heating the slab to a temperature of about 1300° to 1400°, hot rolling to hot band thickness, removing hot mill scale, cold rolling to an intermediate thickness strip without annealing said hot band, subjecting the cold rolled intermediate thickness strip to an intermediate anneal at a temperature of 1010° to about 1100°C with a total time of heating and soaking of less than about 180 seconds, cold rolling to a final thickness of less than 0.30 mm, decarburizing, coating the decarburized strip with an annealing separator such as magnesium oxide, and subjecting the coated strip to a final anneal under reducing conditions at a temperature of about 1150° to 1250°C to effect secondary recrystallization.

(Complete Specification 17 pages)

CLASS : 24 B.

160202

Int. Cl. : F 16 d—65/38.

#### "AUTOMATIC SLACK ADJUSTER FOR A VEHICLE BRAKE SYSTEM".

Applicant : WESTINGHOUSE BRAKE AND SIGNAL COMPANY LIMITED, A BRITISH COMPANY, OF PEW HILL, CHIPPENHAM, WILTSHIRE, ENGLAND.

Inventor : GEOFFREY ROBINSON TREGONING.

Application for Patent No. 59/Del 84 led on 20th Jan., 1984.

Convention on 03rd Feb., 1983 (83 02914) (U.K.).

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 8 Claims

An automatic slack adjuster for vehicle brake system in which an input member is connected to impart to a brake operating shaft a rotational movement for applying and releasing the brakes and the brakes are returned to a position of predetermined clearance in the released condition, the slack adjuster comprising an output member for connection with the brake operating shaft for imparting the rotational movement, an input member to which a brake operating force is applied, the input member and output member being pivoted in opposite directions, a main clutch driven driven ring threadedly mounted on the output member and having a clutch face and resiliently engaged with cooperating clutch face on the input member, the threaded mounting urging the clutch faces into engagement when a force is applied to the input member in a sense to rotate the shaft to apply the brakes, the input member is permitted limited axial movement relative to the

output member, and a sensor clutch having a first sensor clutch member carried by the output member and a second sensor clutch member permitting lost rotational movement relative to a datum member, which determines the predetermined brake clearance, and the axial movement of the input member operates to disengage the sensor clutch members when the reaction force of the shaft rises as a braking force is produced the arrangement being characterised in that the sensor clutch is a positive clutch, the clutch faces of the sensor clutch members being formed with a multiplicity of teeth and urged into engagement by a resilient bias means so that excess slack in the brake system is absorbed by a ratchet-like relative movement of the first sensor clutch member relative to the second sensor clutch member.

Compl. Specn. 18 pages.

Drgs. 6 sheets.

CLASS : 148 E. K.

160203

Int. Class : G02b 27/02 G03b 21/00.

#### "A FILM STRIP VIEWER".

Applicant : KINGSWAY ENTERPRISES PRIVATE LIMITED, 12, SHAM NATH MARG, DELHI-110 054, INDIA, AN INDIAN COMPANY.

Inventor : RAVI GUPTA.

Application for Patent No. 70/Del/84 filed on 24th January, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 5 Claims

A film strip viewer comprising a housing with a supporting plate disposed therein for supporting a film strip at a hub provided with said plate, a spring loaded gate plate in engagement with said hub characterized in that said gate plate carries a pin within the housing for receiving a vertically disposed actuator the arrangement being such that a displacement of said supporting plate and gate plate in the forward direction and wherein said gate plate carries a stopper arm adopted to cooperative with a stopper pin provided in said housing to control the displacement in the reverse direction.

Compl. Specn. 7 pages.

Drg. 1 sheet.

CLASS : 195 E.

160204

Int. Cl. : F17c 13/12 & F16k 17/16.

#### "A REVERSE BUCKLING RUPTURE DISC".

Applicant : CONTINENTAL DISC CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF STATE OF MISSOURI, U.S.A., OF 4103 WEST RIVERSIDE, RIVERSIDE, STATE OF MISSOURI, UNITED STATES OF AMERICA, MANUFACTURERS.

Inventor : ROBERT MICHAEL MOZLEY.

Application for Patent No. 74/Del/84 filed on 25th January, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 12 Claims

A reverse buckling rupture disc including a prebulged dome, a flange surrounding said dome and extending radially outwardly from the base of said dome, a transition region located between said flange and said base of said dome and a groove extending at least partly around said transition region.

Compl. Specn. 34 pages.

Drg. 8 sheets.

CLASS : 13 A.

160205

Int. Cl. : B65d—43/00.

#### "REMOVABLE COVER" ADAPTED TO COVER THREE-DIMENSIONAL ARTICLES".

Applicant : BASSETTI S.p.A., A COMPANY ORGANISED UNDER LAW OF THE ITALIAN REPUBLIC OF VIA MICHELE BAROZZI 3, MILAN, ITALY.

Inventor : PIERO BASSETTI.

Application for Patent No. 106/Del/84 filed on 6th February, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 6 Claims

A cover made of a piece of fabric or non-woven fabric essentially polygonal in shape, adapted to enwrap three-dimensional articles, characterized by the fact that it features on two end flaps of two opposed sides a hemming of said flaps which forms a slide-seating within which corrugating elements are placed, each of the two free flaps of said cover also featuring two eyelets adapted to receive said corrugating elements.

Compl. Specn. 6 pages.

Drg. 2 pages.

CLASS : 90J.

160206

Int. Cl. : C03b.

#### "MOULD FOR USE IN MANUFACTURING ARTICLES OF GLASSWARE".

Applicant : EMHART INDUSTRIES, INC., OF 426 COLT HIGHWAY, FARMINGTON, CONNECTICUT 06032, U.S.A., A CORPORATION OF CONNECTICUT, U.S.A.

Inventor : STANLEY PETER JONES.

Application for Patent No. 112/Del/84 filed on 7th February, 1984.

Convention date 5-3-83/8306145/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 7 Claims

A mould for use in manufacturing articles of glassware, the mould having at least one cooling passage (10, 12, 14) extending longitudinally therein so that cooling fluid can flow through the cooling passage and cool the mould, characterised in that the cooling passage (10, 12, 14) comprises a central portion (10) extending through a central region of the mould and connecting entrance (14) and exit (12) portions of the cooling passage, so that cooling fluid can flow from the entrance portion (14) into the central portion (10) and from thence into the exit portion (12), the central portion (10) being of substantially uniform cross-sectional area, and the exit portion (12) having a greater cross-sectional area throughout than the central portion (10).

Compl. Specn. 11 pages.

Drg. 3 sheets.

CLASS : 86 AB.

160207

Int. Cl. : A 47 c - 4/28.

**"BACKPACK CUM CHAIR.**

Applicant : PRASHANT GUPTA, VIBHU AGRAWAL, BOTH OF DEPARTMENT OF MECHANICAL ENGINEERING, INDIAN INSTITUTE OF TECHNOLOGY, KANPUR-208015 DR. PRASHANT GUPTA, ASSISTANT PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, INDIAN INSTITUTE OF TECHNOLOGY, KANPUR-208016 AND PROF. SRINIVASA SAMPATH, DIRECTOR, INDIAN INSTITUTE OF TECHNOLOGY, KANPUR-208 016, INDIA, ALL INDIAN NATIONALS.

Inventors : PRASHANT GUPTA, VIBHU AGRAWAL, PRASHANT KUMAR.

Application for Patent No. 230/Del/84 filed on the 13th March, 1984. Complete Specification left on the 03rd December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110 005.

**11 Claims**

A Backpack cum chair which consists of two frames made of metal or rigid strong plastic material, wherein the first frame consists of two longitudinal side members inter-connected by means of two or more transverse side members and a ruck-sack mounted thereon and the second frame consists of two longitudinal side members curved at one end, inter-connected by means of two or more U-shaped transverse side members the width of the second frame is such that the first frame just fits into it and the second frame is secured to the first frame by securing means so that by movement of the two frames relative to each other around the securing means the assembly of the two frames in one position becomes a backpack and in another position it becomes a chair.

Provl. Specn. 2 pages.

Drg. 2 sheets.

Compl. Specn. 7 pages.

CLASS : 129 G.

160208

Int. Cl. : B23b 39/00.

**"BORING TOOL".**

Applicant : HEINZ KAISER AKTIENGESSELLSCHAFT, A SWISS COMPANY, OF GLATTALSTRASSE 837, 8153 RUMLANG, SWITZERLAND.

Inventors : HANS WOERZ & DIETER PAPE.

Application for Patent No. 327/Del/84 filed on 16th April, 1984.

Convention date 27th June, 1983/8317433/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, New Delhi-110 005.

**5 Claims**

A boring tool for hollowing out bores, comprising a mount on which one or more boring heads are mounted on a key of the mount so to be slidable transversely relative to axis, the key having in each of two opposed lateral surfaces a recess deepening towards the tool axis, and fixing means fixing the or each boring head on the mount, the fixing means bearing on a clamping surface in the respective recesses to fix the or each boring head on the mount.

Compl. Specn. 6 pages.

Drg. 3 sheets.

CLASS : 208.

160209

Int. Cl. B 43 K - 7/10.

**"INK WRITING INSTRUMENT".**

Applicant : SCRIPTO, INC., A CORPORATION OF THE STATE OF GEORGIA, U.S.A., HAVING A PLACE OF BUSINESS AT P.O. BOX 47800, DORAVILLE, GEORGIA, 30362, U.S.A.

Inventors : BEHROOZ ALIZADEH PARVIN, WALTER JONATHAN PETER.

Application for Patent No. 331/Del/1984 filed on the 17th April 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**8 Claims**

An ink writing instrument comprising a barrel forming the body portion of the writing instrument and having an ink receiving bore and front and rear openings communicating with said bore, said barrel being formed of plastics material which is substantially impermeable to pressurized ink, an ink follower element within the bore adapted for gradual forward movement during use, a charge of ink within the bore of the barrel forwardly of said follower, a ball point assembly unit lockingly and sealingly engaged within the forward opening of the barrel ahead of the charge of ink with the ink charge substantially trapped between the follower and said unit, the bore of the barrel rearwardly of said follower being pressurized with gas substantially above ambient atmospheric pressure, and a rear closure plug for the barrel lockingly and sealingly engaged in the rear opening of the barrel and permanently retaining the pressurized gas in the barrel.

Compl. Specn. 18 pages.

Drgs 3 sheets.

CLASS : 139-D.

160210

Int. Cl. C01h. 1/26.

**"HYDROGEN-CONCENTRATING PROCESS AND APPARATUS".**

Applicant : L'AIR LIQUIDE SOCIÉTÉ ANONYME POUR L'ÉTUDE ET L'EXPLOITATION DES PROCÉDÉS GEORGES CLAUDE, A FRENCH BODY CORPORATE OF 75, QUAI D'ORSAY, 75007 PARIS, FRANCE.

Inventors : PIERRE GAUTHIER.

Application for Patent No. 386/Del/84 filed on the 7th May, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**7 Claims**

A process for concentrating hydrogen of a gas containing in addition to hydrogen, one or more other less volatile components, of the type comprising cooling the gas to be treated until there are obtained a vapour fraction rich in hydrogen and a liquid fraction; collecting and expanding the liquid fraction and vaporizing it in heat exchange relation to said gas; expanding at least a part of the vapour fraction in a gas-bearing turbine, then heating it in heat exchange relation to said gas; taking off a first output of the vapour fraction, after heating, so as to supply auxiliary gases to the turbine; and adding to said expanded liquid fraction a second output of said vapour fraction expanded to the same pressure, wherein the auxiliary gases issuing from the turbine are employed for constituting said second output.

Compl. Specn. 12 pages.

Drg. 1 sheet.

CLASS 40 E, 40 F, 88 D &amp; 201 D.

160211

Int. Cl. F 17 d - 1/02.

**"METHOD AND APPARATUS FOR SEPARATING AND RECOVERING LIQUID COMPONENTS FROM THE EFFLUENT FROM A NATURAL GAS PIPELINE CONTAINING BOTH GASEOUS AND LIQUID COMPONENTS".**

Applicant : TEXAS EASTERN ENGINEERING LTD., A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, HAVING ITS OFFICE AND PRINCIPAL PLACE OF BUSINESS AT 1201 KINNERY STREET, ONE HOUSTON CENTER, HOUSTON, TEXAS 77252, UNITED STATES OF AMERICA.

Inventor : RONALD LESTER BULS AND JAMES PERRY GILCREASE.

Application for Patent No. 439/Del/84 filed on the 28th May, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 14 Claims

A method for separating and recovering liquid components from the effluent from a natural gas pipeline containing both gaseous and liquid components under the conditions existing in the pipeline, which comprises (a) introducing the effluent into an intermediate portion of a vertical separation zone wherein the gaseous components of the effluent are disengaged from the liquid components and move upwardly in the zone and the liquid components in the fluid stream, disengaged from the gaseous components, move downwardly towards the bottom of the separation zone; (b) withdrawing the separated gaseous components from the upper portion of the separation zone and re-introducing them into the pipeline at a point downstream of the point of withdrawal; (c) gradually withdrawing on a substantially continuous basis a stream of the liquid components from a bottom portion of the separation zone for delivery to a point outside the separation zone; (d) diverting liquid components in excess of the quantity withdrawn in step (c) into an accumulation zone having a gradually rising slope extending from substantially the bottom of the separation zone to a point in the upper portion of the separation zone lying above the point of introduction of the fluid stream and below the point of withdrawal of the gaseous components; and (e) withdrawing gas displaced by and disengaged from the liquid in the accumulation zone into the upper portion of the separation zone for introduction into the pipeline.

Compl. Specn. 24 pages.

Drgs. 2 sheets.

## PATENT SEALED

146811	151615	153254	153875	157040	157041	157100
157101	157102	157142	157186	157190	157193	157231
157279	157280	157293	157295	157296	157297	157298
157318	157319	157412	157453	157454	157455	157456
157467	157495	157512	157513	157533	157662	157678
157709	157711	157965	157966	158018	158019	158039
158047	158048	158265				

## AMENDMENT PROCEEDINGS UNDER SECTION 57

Notice is hereby given that Schlumberger Ltd., a Corporation of the Netherlands Antilles, located at 277 Park Avenue, New York, New York 10017, U.S.A. have made an application under Section 57 of the Patents Act, 1970 for amendment of application form and specification of their application for Patent No. 159632 for "Induction logging systems". The amendments are by way of correction. The

application for amendment and the proposed amendments can be inspected free of charge at the Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-700 017 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed Form 30 within three months from date of this notification at the Patent Office, Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall lapse within one month from the date of filing the said notice.

## RENEWAL FEES PAID

139374	139622	139623	141335	141671	141686	141687
142105	142172	142291	142330	142665	142745	142824
143147	143319	143338	143359	143388	143432	143552
143710	143901	144223	144251	144305	144653	144796
144947	146535	146711	146712	146713	146714	146808
147343	147372	147603	147654	147663	148287	148813
149059	149380	149632	150097	150363	150663	152080
152252	152322	152929	152930	153031	153541	153653
153907	153964	153966	153994	154162	154213	154431
154712	155041	155240	155241	155761	155987	156142
156297	156351	156424	156565	156599	156600	156737
156749	156943	156966	157039	157178	157275	157286
157418	157419	157469	157535	157536	157549	157550
157597	157622					

## CESSATION OF PATENTS

139494	139495	139497	139500	139502	139510	139512
139513	139514	139519	139520	139521	139522	139524
139525	139526	139527	139529	139530	139533	139534
139536	139537	139538	139542	139546	139549	139551
139554	139555	139556	139557	139558	139559	139560
139562	139563	139564	139565	139566	139567	139568
139570	139575	139576	139577	139578	139579	139580
139581	139582	139583	139585	139586	139591	139592
139594	139595	139596	139597	139598	139599	139601
139603	139604	139605	139606	139610	139611	139612
139613	139614	139616				

## RESTORATION PROCEEDINGS

## (1)

Notice is hereby given that an application for restoration of Patent No. 144768 dated the 13-10-77 made by I.T.C. Limited on the 13-10-86 and notified in the Gazette of India, Part-III, Section 2 dated the 7-2-87 has been allowed and the said patent restored.

## (2)

Notice is hereby given that an application for restoration of Patent No. 154127 dated the 22-11-78 made by Outokumpu Oy on the 14-10-86 and notified in the Gazette of India, Part III, Section 2 dated the 7-2-87 has been allowed and the said patent restored.

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Design Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

- Class. 1.** No. 157996. Dinesh Kumar Garg, Advance Appliances (India), 2551 (Sataghara) Dharam Pura, Dariba, Delhi-110006, India, Indian National. "Electric Icen". 10th February, 1987.
- Class. 1.** No. 157573. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "A Computer Visual Display Unit". 23rd October, 1986.
- Class. 1.** No. 157582. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "A Computer". 23rd October, 1986.
- Class. 1.** No. 157591. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "Computer". 23rd October, 1986.
- Class. 3.** No. 157570. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "A Computer Data Entry System". 23rd October, 1986.
- Class. 3.** No. 157577. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "Personal Computer Monitor". 23rd October, 1986.
- Class. 3.** No. 157578. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "A Visual Display Unit". 23rd October, 1986.
- Class. 3.** No. 157583. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "A Computer". 23rd October, 1986.
- Class. 3.** No. 157585. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "A Visual Display Unit Key Board for Computer". 23rd October, 1986.
- Class. 3.** No. 157588. Wipro Information Technology Limited, of Bakhtawar, 14th Floor, 229, Nariman Point, Bombay-400 021, Maharashtra, India, an Indian Company. "A Keyboard for Computer". 23rd October, 1986.
- Class. 3.** Nos. 157667, 157669. Universal Luggage Manufacturing Company Private Limited, (an Indian Company) at Building 'B', Shah Industrial Estate, Saki Vihar Road, Bombay-400 072, State of Maharashtra, India. "Suitcase With Fastening Chain". 17th November, 1986.
- Class. 3.** No. 157708. Interlego A/S., a Danish Company, of Aastvej 1, DK-7190 Billund, Denmark. a "Roof Element For A Toy Building Set". 26th November, 1986.
- Class. 3.** No. 157709. Interlego A/S., a Danish Company, of Aastvej 1, DK-7190 Billund, Denmark. a "Wall Element For A Toy Building Set". 26th November, 1986.
- Class. 3.** No. 157711. Interlego A/S., a Danish Company, of Aastvej 1, DK-7190 Billund, Denmark. a "Toy Driver's Cabin". 26th November, 1986.
- Class. 3.** No. 157712. Interlego A/S., a Danish Company, of Aastvej 1, DK-7190 Billund, Denmark. a "Toy Semitrailer". 26th November, 1986.
- Class. 3.** No. 157713. Interlego A/S., a Danish Company, of Aastvej 1, DK-7190 Billund, Denmark. a "Toy Car Base". 26th November, 1986.
- Class. 3.** Nos. 157715, 157720. Interlego A/S., a Danish Company, of Aastvej 1, DK-7190 Billund, Denmark. a "Toy Building Element". 26th November, 1986.
- Class. 3.** No. 157719. Interlego A/S., a Danish Company, of Aastvej 1, DK-7190 Billund, Denmark. a "Toy Rail Element". 26th November, 1986.
- Extn. of Copyright for the Third period of five years.*
- No. 146424. ....Class-1.
- Nos. 146412, 146413, 146414, 146417, 146418, 146419, 146420. ....Class-3.

R. A. ACHARYA  
Controller General of Patents, Designs  
and Trade Marks

